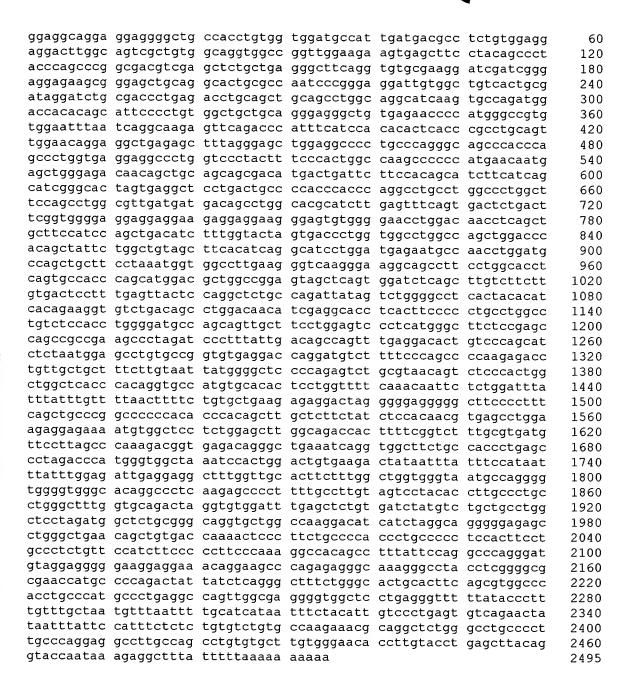
```
gaactcccgc aggaaagtgg aaaggagctg ttgcgcagct gctccggcgg catcagcacc
                                                                     2820
accactcacc gcgtgccggc cgcncagcct ctcgggtaca tgctccgcac agtccagccc
                                                                     2880
gteceacteg cacteegege tgttgeagee etggtegeag tgeeegtege tgaagtggte
                                                                     2940
cttgcagtac tggtcgtaca gggggttgca ctggccttcc gcacgctggc agtcaaagcc
                                                                     3000
gtcgaagagg cagccggctg agttgcactg gctgtcacag tggccgtcac tgaagtactt
                                                                     3060
ccagcactgc agagactgcg tgcagttctt ccaggggtca ttgaagttga qqqaqcaqtc
                                                                     3120
accgccgtcc cagccgcacg cgtggttgtt gcactgcagg ctgcagacct tgttgcccgc
                                                                     3180
gteeteetgg caetegggea getegeaege eteetegate ageggegggg ggatgtegeg
                                                                     3240
cccggcccca cccccgaagc tgtagtccag gatgtggcac aagagcccgt tgaatttggc
                                                                     3300
ggggcacagg caacggtaga aggggctctc ggatgtgggc tcacaggtcc cctggttgta
                                                                     3360
gcaggggttg ccgcccaggc aggggctgct ggccgggaac tggcattcgg ggcccgtgaa
                                                                     3420
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                                                                     3480
gcagcgcagg ctgccgcagg tacgagcgtc attctcacac gtggcgccct cgaaqcccqc
                                                                     3540
agggcacttg cagatgaaac ccgcgggcgg tgttggaggc cacggcgcag gtgcccccat
                                                                     3600
tettgcaggg ettgeetttg cagecattga tgaeggaete geageggege eeggtgtgae
                                                                     3660
cagcacggca ctcgcagtgg aagtcattga cgcgctgcac gcagttctgg gtgccacggg
                                                                     3720
cgtcgcaggg attggacagg cactcgttga catcccctc acagcgctca cccacgaagc
                                                                     3780
ccggcgggca ggtgcagctg tagccgccca cctggtccac gcaggtgccg ttgttaaagc
                                                                     3840
acttggggct ccgggacacg gggtcaacgg ggggattgca qtcqtccacq ttqatctcac
                                                                     3900
agtgcacacc ctgagtgccc cgtgggcagg agcacttgta ggtgttgggg aggtcgaggc
                                                                     3960
aggtgccccc gttctggcag gggtgggaga ggcactcgtc gatctcctca gagcagttca
                                                                     4020
ccccgtggta gccggccacg cacttgcagg agtagccgcc caggtagtcc gtgcaggtgg
                                                                     4080
ccccgttctg gcaggggctg ggtgagcact cgtccaccag gtcctcacag tagctgcctg
                                                                     4140
tgtagcccgc ctggcagcgg cagtggtgcg tgttgcccgc gtccacacag agccctccat
                                                                     4200
gctggcacag gcgggcaacg tcaacacctt gtcgctgcgc agccacctca caggacacgc
                                                                     4260
tgggcacgtc gcagtaaagg ccggtccagc cgctggggca ctcqcaqcqg tactqqqtqt
                                                                     4320
gggtctgcca gcatttgccg ccgttcttgc agggcgagga gtcacaccag tgcacaaggt
                                                                     4380
tetggeagtt ggggeeagtg tageeetggg ggeaggtgea eetgtggaga eegegaeegt
                                                                     4440
cctgacaggt gccgcctagc aggcagggtc gtgagtcgca ctcattgact acqtqctqqc
                                                                     4500
agtagctgcc cgtgaagccg ggtggacaca ggcaggtgaa cgagttgatg ccgtccacgc
                                                                     4560
aggtgccacc gttgaagcag gagctctctg tgcagtcagg cgtgttgttc tcacagtgga
                                                                     4620
tcccgctgaa gcctgcgggg caggtgcacg tgtagctgtc cacgcagtcc gtgcagttgg
                                                                     4680
eccegttgeg geaggggtea etggeaeact egttgatgte etceteaeag aaagtgeeee
                                                                     4740
ggaagccggg caggcagtcg cagaaggccg tgttgatgcc gtctgtgcag gagcccccgt
                                                                     4800
tgtgacacgg gttgggccgg cagtcgtcga tgtcggtctc gcagttgcgc ccactgtagc
                                                                     4860
cggcctggca gtggcagcgg tagccgccgt gggtgttctg gcaggatgcg ccgtgccggc
                                                                     4920
acgggctcag aacgcactcg ttgat
                                                                     4945
```

```
<210> 3231
<211> 2495
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(662)

<223> similar to gi5901836 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3231



```
<210> 3232
<211> 958
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(53)
<223> similar to gi2828710 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3232
cccggaattt ccgggtcgac gatttcgtcg ctgagcttaa actgaagcaa gttcggtgga
                                                                       60
cgccggcggc gccctgatct aaagaaacga ctcagggact gcggcgcttg cacgtcaacg
                                                                      120
ggaggtgtga gcccaaaggt ctggacccag aaatgggacg tcggtcatca gatactgaag
                                                                      180
aagaaagcag aagcaagaga aaaaagaaac accgtagacg gtcctcctcg agcagttctt
                                                                      240
cagatagtag aacatacagc cgaaagaaag gaggaaggaa atcaagatca aagtcaagat
                                                                      300
cttggtccag agatcttcag cctcgttcac attcttatga tagaagacgc aggcatcgat
                                                                      360
caagcagtag ctcttcttat ggctccagaa ggaaacgaag tcgaagtcgt tcaaggggtc
                                                                      420
gagggaaatc ctatagagtt cagaggtcta ggtcaaaaag cagaacaaga aggtccaggt
                                                                      480
caagacctcg tctccgttct catagtcgta gcagtgaaag gtccagtcac agaagaacgc
                                                                      540
gtagtcggtc tcgggataga gaacgacgta agggcagaga taaagagaaa agagaaaagg
                                                                      600
agaaggataa agggaaggac aaggaattac ataacatcaa acgtggggaa tctggaaaca
                                                                      660
tcaaagctgg attagaacat ctgccaccag ctgaacaggc caaagccaga ctacagctgg
                                                                      720
ttcttgaagc tgctgcaaaa gctgatgaag cattgaaagc caaagaaaga aatgaggaag
                                                                      780
aagcaaagag aagaaaggag gaagaccaag ccaccctggt agaacaagta aaaagagtaa
                                                                      840
aagaaattga agctattgaa agtgattctt ttgttcagca gacattcaga tcaagtaaag
                                                                      900
aagtcaaaaa gtcagtggaa cctaatggag tgaaacaggc acctttaaca tcaggacq
                                                                      958
     <210> 3233
     <211> 748
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (71) ... (651)
     <223> similar to gi5732634 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3233
tttcgtgcaa agaaaactgt gagagagaa atttttaaaa agcagctggg gcctgaggtt
                                                                       60
tetececcag taccetgggt caceteagee cagagetgge ggeaggeece cageeetea
                                                                      120
tgtcagagee ecetgtgtae tgtaacetgg tggaeetteg eegetgteet eggteeceae
                                                                      180
ccccaggccc tgcatgcccc ctgctgcaga ggctggatgc ctgggagcag cacctggacc
                                                                      240
ccaactctgg acgctgcttc tacataaatt cactgactgg ctgcaagtcc tggaagcccc
                                                                      300
cgcgccgcag tcgcagcgag acgaaccctg gctccatgga ggggacacag accctgaaga
                                                                      360
ggaacaatga tgtcctgcaa cctcaggcaa agggcttcag atctgacaca qgqaccccaq
                                                                      420
aaccgcttga cccacagggt tcactcagcc tcagccaacg cacctcgcag cttgaccctc
                                                                      480
caqcettqca ggcccctcga cetetgccge agetectgga egaceeccat gtgaacetee
                                                                      540
cattletttg tgaaggecaa gateeteett geeeceett eeectttte etgeteeaca
                                                                      600
taaacatett eetettetg aatateetee taeceageee teececagea aetttaaggg
                                                                      660
acttcactcc tgggagaccc cctagggaaa gccgtggcca ctatggaggg cgagggtgat
                                                                      720
tacagatece atteceteca etteceag
                                                                      748
```

```
<210> 3234
<211> 1938
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (183)...(985)
<223> similar to gi193527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3234 cgaaaaggag gtcctgtctt cggggagaaa cattctaaat cacctgccct ctcttcctgg 60 ggggacccag teetgetgaa gacagatgtg eeattgaget cagcagaaga ggcagagtge 120 cactgggcag acacagaget gaacegtege egeeggeget tetgeageaa agttgaggge 180 tatggaagtg tatgcagctg caaggacccc acacccatcg agttcagccc tgacccactc 240 ccagacaaca aggtcctcaa tgtgcctgtg gctgtcattg cagggaaccg acccaattac 300 ctgtacagga tgctgcgctc tctgctttca gcccaggggg tgtctcctca gatgataaca 360 gttttcattg acggctacta tgaggaaccc atggatgtgg tggcactgtt tggtctgagg 420 ggcatccage atacteceat cageateaag aatgeeegeg tgteteagea etacaaggee 480 agcctcactg ccactttcaa cctgtttccg gaggccaagt ttgctgtggt tctggaagag 540 gacctggaca ttgctgtgga ttttttcagt ttcctgagcc aatccatcca cctactggag 600 gaggatgaca gcctgtactg catctctgcc tggaatgacc aggggtatga acacacggct 660 720 aggtccttgt acaaggagga gcttgagccc aagtggccta caccggaaaa gctctgqqat 780 tgggacatgt ggatgcggat gcctgaacaa cgccggggcc gagagtgcat catccctgac 840 gtttcccgat cctaccactt tggcatcgtc ggcctcaaca tgaatggcta ctttcacgag 900 gcctacttca agaagcacaa gttcaacacg gttccaggtg tccagctcag gaatgtggac 960 agtctgaaga aagaagctta tgaagtggaa gttcacaggc tgctcagtga ggctgaggtt 1020 ctggaccaca gcaagaaccc ttgtgaagac tctttcctgc cagacacaga gggccacacc 1080 tacgtggcct ttattcgaat ggagaaagat gatgacttca ccacctggac ccagcttgcc 1140 aagtgcctcc atatctggga cctggatgtg cgtggcaacc atcgggggcct gtggagattg 1200 tttcggaaga agaaccactt cctggtggtg ggggtcccgg cttcccccta ctcagtgaag 1260 aagccaccct cagtcacccc aattttcctg gagccacccc caaaggagga gggagcccca 1320 ggagccccag aacagacatg agacctcctc caggaccctg cggggctggg tactgtgtac 1380 ccccaggctg gctagccctt ccctccatcc tgtaggattt tgtagatgct ggtaggggct 1440 ggggctacct tgtttttaac atgagactta attactaact ccaaggggag ggttcccctg 1500 ctccaacacc ccgttcctga gttaaaagtc tatttattta cttccttgtt ggagaagggc 1560 aggagagtac ctgggaatca ttacgatccc tagcagctca tcctgccctt tgaataccct 1620 cactttccag gcctggctca gaatctaacc tatttattga ctgtcctgag ggccttgaaa 1680 acaggccgaa cctggagggc ctggatttct ttttgggctg gaatgctgcc ctgagggtgg 1740 ggctggctct tactcaggaa actgctgtgc ccaacccatg gacaggccca gctggggccc 1800 acatgctgac acagactcac tcagagaccc ttagacactg gaccaggcct cctctcagcc 1860 ttctctttgt ccagatttcc aaagctggat aagttggtca ttgattaaaa aaggagaagc 1920 cctctgggaa aaaaaaaa 1938

<210> 3235 <211> 2186

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2175)...(1949)
<223> similar to gi288145 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3235 cggataaaga cgctgggaga ttgacatgca tttcgaccaa tagcattgca gagaggcgta 60 tcatttcgcg gatgttccaa tcagtacgca gagagtcgcc gtctccaagg tgaaagcgga 120 agtagggcct tcgcgcacct catggaatcc cttctgcagc acctggatcg cttttccgag 180 cttctggcgg tctcaagcac tacctacgtc agcacctggg accccgccac cgtgcgccgg 240 gccttgcagt gggcgcgcta cctgcgccac atccatcggc gctttggtcg gcatggcccc 300 attegeaegg etetggageg geggetgeae aaceagtgga ggeaagaggg eggetttggg 360 cggggtccag ttccgggatt agcgaacttc caggccctcg gtcactgtga cgtcctgctc 420 tetetgegee tgetggagaa cegggeeete ggggatgeag etegttaeea eetggtgeag 480 caactettte eeggeeeggg egteegggae geegatgagg agacacteea agagageetg 540 gcccgccttg cccgccggcg gtctgcggtg cacatgctgc gcttcaatgg ctatagagag 600 aacccaaatc tccaggagga ctctctgatg aagacccagg cggagctgct gctggagcgt 660 ctgcaggagg tggggaaggc cgaagcggag cgtcccgcca ggtttctcag cagcctgtgg 720 gagcgcttgc ctcagaacaa cttcctgaag gtgatagcgg tggcgctgtt gcagccgcct 780 ttgtctcgtc ggccccaaga agagttggaa cccggcatcc acaaatcacc tggagagggg 840 agccaagtgc tagtccactg gcttctgggg aattcggaag tctttgctgc cttttgtcgc 900 gccctcccag ccgggctttt gactttagtg actagccgcc acccagcgct gtctcctgtc 960 tatctgggtc tgctaacaga ctggggtcaa cgtttgcact atgaccttca gaaaggcatt 1020 tgggttggaa ctgagtccca agatgtgccc tgggaggagt tgcacaatag gtttcaaagc 1080 ctctgtcagg cccctccacc tctgaaagat aaagttctaa ctgccctgga gacctgtaaa 1140 gcgcaggatg gagattttga agaacctggt cttagcatct ggacagacct cttattagct 1200 cttcgtagtg gtgcatttag gaaaagacaa gttttgggtc tcagcgcagg cctcagttct 1260 qtataggcaa tgctgtgtta ttacttgaat atagaatata tagtttacaa aatgaaaatt 1320 ccaatgttct caccaaatat atgccttcgt gtgtccaaag tataattatt ttagatgcta 1380 attttgaata gtttattaaa cagttataaa tatgcaaagt agctggcatg tagtgtcacg 1440 gattttctgg atagaggaag tgattggaag tattccactt aaagccatgg aattagcaat 1500 agtttgcttt ttaatagaag gcccatttgt aagaatgttg aaaatatgtg taccgtttaa 1560 agaaaaagca gctttaaagt gacaaacaaa ataccctttt tcttttagta tgggttattt 1620 ttctaggttt tctgtccctc cctcagtagt gaagagtttt ctttattcct qqcaqtqtca 1680 ggaatattgg tttgaaaagc tgttggccta tctggagttt ggccttgtta acctagtatt 1740 ctaaccagtt aaccagcctt agtatgcatt aaaattgtat tgttcagaaa gtttgtttct 1800 cattttctgc aaattcttac tttgaaaatg aatcaccaca tagtatgtcc ctttaaagca 1860 ttgacgcaca gacaaatgtt taaagcacag taaatacaaa tatatgcctt tggatattaa 1920 1980 tcacccaaac tggagggcag gggggggatc actgttaagg gcaacctttg cctcccagga 2040 tcaagcaatt ttgactcacc ctcccaagta gctgggatta caggggcagg ccaccatqcc 2100 cggctaattt tttgtatttt tagtaaaaac ggggtttaac catgctggcc aggctggtct 2160 caaacacctg accttgggat ccgtcc 2186

<210> 3236 <211> 1257

<222> (150)...(684)

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(1258)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (1210)...(840)
     <223> similar to gi930045 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3236
ttttttttt ttcagactta ttaaacatga tttattactt ttgggacagg gagacgggga
                                                                       60
gaaattgata gaccaataaa tattgcacaa ggctgctggt ggtgggggag atccagaccg
                                                                      120
aggtgagttt ctgtagaaag ggtgaaagac ctgggcgagg aaggcacctg aggttgccgg
                                                                      180
gagccaggtt gggagcgagt cttggtggcg agggtggttt ctggttcacc tacctagcac
                                                                      240
aaggteteea aeteetteag eetagacaee etgateagea getgaeeagt tggeetgeea
                                                                      300
tttaagcagc agcaattgat agcaagatca ggtttccttt agaaattctt attggttcct
                                                                      360
tecetgeage gaeaacegge tgeceaaagt tgatggaace cageagetgt cactggaegt
                                                                      420
ttgccaggag gcaggctaa cggccttggt gcacatgatg ggcagtttgc ccggagcggg
                                                                      480
ctgaaaaaga caatgatata tagtctcggg agggcgcagc tttaactctt ctacctggcg
                                                                      540
gtttacagaa gccagagctg agcagctgtg attggcagac accetcaget cetcagecaa
                                                                      600
accacacttg gatgtttatg gtgagggtgg gactaagaaa tggaacagaa gcagagctaa
                                                                      660
atcgctttga ttggctgttc atcgaagggg cggggaagac ttaacaactg ctagctgctt
                                                                      720
tgattggctg ctttgcttaa gcacacagtg cagcaaaaat aatcacctgt cagttattgg
                                                                      780
aagttggagt gaaaagtata ataaccgtaa ttgacagcct gtcgtgaagg aggcggggct
                                                                      840
tagtteetag cetgetgact gggcagggag gtaggtteta etcaggagat gttactgetg
                                                                      900
ggcgtggctt gcgggggctc ggaagtgatc ggagccactg ggtctagttt ggggaaaccc
                                                                      960
gggggtgggt acaatcccat gctgggggtc agggcctgca gatgcgccag ggcccgagtt
                                                                     1020
ccgttgaagg tcacctcaca gcctgacttg gctaggagcc agttctccac ctccgaccgg
                                                                     1080
agccacctgg aggtctcttc gggcgagcct tgagtgcccc ctggccgccg ggccaggaag
                                                                     1140
ctgtgagcca gcagcgcctc cttggtgtgc tcgtcctgcg cgcgcagggc cagggcgatg
                                                                     1200
agcagctccg gaattccncc gcnctgacta aggtctcaaa anncnagggt gatctat
                                                                     1257
    <210> 3237
     <211> 759
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
```

<223> similar to gi1532033 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

```
<400> 3237
tttcgtccag gacgaggtgg ccaggcggcc cccatggcgt ccctggtcta ggcggagaac
                                                                       60
cgcctgggcg atgagtgaga acctcgacaa cgagggcccg aagcccgtgg agagctgtgg
                                                                      120
ccaggagage ageagtgeee tgagetgeee tacegteteg gtgeeeeetg cageeeegge
                                                                      180
agccctggag gaggtggaga aagagggcgc tggggcggct acagggccgg ggcctcagcc
                                                                      240
cgggctctac agctacatca gggatgactt gtttacctct gagatcttta aactggagct
                                                                      300
gcagaacgtg cctcgccacg ccagcttcag cgacgtccgg cgcttcctgg gccgctttgg
                                                                      360
tctgcagccc cacaaaacca aactctttgg gcaaccaccc tgcgcctttg tgacattccg
                                                                      420
cagcgctgca gagagggaca aggccctgcg cgttttgcat ggtgccctct ggaaaggccg
                                                                      480
cccactcagt gtgcgcctgg cccggcccaa ggccgacccc atggccagga ggaggcgaca
                                                                      540
ggagggtgag agtgagccac cagtaacacg agtggccgac gtggtgaccc ctctatggac
                                                                      600
agtgccctat gctgagcagc ttgagcggaa gcagctggag tgcgagcagg tgctgcacaa
                                                                      660
acttgccaag tgagtgtggg cgcaaaacaa ccctcttggc cagggctctg cccggcctgt
                                                                      720
gcttcctgag cctgtccgaa ttccaccgcg tttttcag
                                                                      759
```

```
<210> 3238
<211> 2183
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(294)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3238 ttttttttt ttgagacgga gtctcgctct gtcgcccagg ctggagtgca gtggcgcgat 60 ctcggctcac tgcaagctcc gcctcccggg ttcacgccat tctcctgcct cagcctcccg 120 agtagetggg actacaggeg ecegetacea egeceggeta attttttgta tttttagtag 180 agacggggtt tcaccgtgtt agccaggatg gtctcgatct cctgacctcg tgatccgccc 240 gcctcggcct cccaaagtgc tgggattaca ggcgtgagcc accgagcccg gcccaagaga 300 ataggggagc caaggaggaa atgtggaaac gcagttgtgt ggcccagcac gagcctgggc 360 gaccaccggg tgacatccgt cccacatcag ggcggcctcc caggtcccat aagggtagcc 420 ccctcatctg caggacagag ggaagccagt cagggccccc ccggacgtta ggaccaggag 480 aaatcaacag gagggcagcc cgtcctctct cttgggggcgc ccacccggcc cggctgagcc 540 etgececace caactecaca gggetgtttt geeteeceae ggaaggeggg etgaggagae 600 aaccagatca ggagagcaag gtcatgaagg aggggacctc tccacacagg tgttccgtgg 660 gaccctcagc agctctggct ctgcctcagg aggtcacctg ccgccctgtg ggagccgcag 720 agcctgacgc tcagccccag gccagctgcg gccaggcctg cgggcccctg gtgatggggt 780 tacgtggggt gcgggataca gctgagtggg aaccggaaac ctattctctt tttaacaaaa 840 ataatcttag gataagaatt attttaacaa catataaaac tgtttcaagc cctcctcccc 900 agagctggcg ctcagcagcc ctagcggctg ctccttcagg cgaagggtgg tttgcagatg 960 tggggagggt gtctggggac gttgctgagc tggctgcaga agggtgggga tatcagggca 1020 cagtetecat gtgtgtgcca agecetggce eccaeagege tegatggace teagcaaget 1080 gcccagccct ggcccaggtg ccccgactgt gggactcagt tgttctgagc acatttgact 1140 ccacttttcc tttaaaaatg aatgtcttgt tcctgtgcat tggtggcatc acagacccca 1200 gctggggcgc gatgtcaaag gtcgggacag ctgtgccggg aggcagccac agggaagctc 1260 acacatcctg tcagtgtcac cttggtttgc aaaacccata tccccggtaa aatgaggccg 1320

```
gacagagggg ctgttaggac agcaaagcag cagtgtccag agacccctca atccccaaag
                                                                     1380
gtccgcaccc tgtcctgcac accctgggcc acgccggcca cacccctctg ctgcaacaag
                                                                     1440
ctcatccctg gacttctggg agaatgaacc cgaggttggt ttggggagac aggtgaggcg
                                                                     1500
gttggatcta cagaacaacc caccatttct gggggccgca gaggatccat cacagacgga
                                                                     1560
tactggggag taaacggccc aggccaggtg cccaggaaag gacggctgag catgtggagc
                                                                     1620
gagagggagg caggtggacg ctgcagaccc caggttcagt gcggcccctc ggctgttcct
                                                                     1680
cccctgtagg gtttggacag acccacccc agccttgccc agctttcaaa ggacaaaagg
                                                                     1740
gagcatcccc cacctactct caggtttttg aggaaacaaa gatttgtggt aactgaaggt
                                                                     1800
gttgggtcag tggccaggtg ccgacactga gctgtgaccc agaggggacg ctgaggaagt
                                                                     1860
gggcgtgagt ggacatgtca ggtggttacc aggcactggt tgttgatggt cggtggttgg
                                                                     1920
gtgtgggcag tcatcagtca tcaggtgtgc tcaggggaca atctcccctc aaccgcacat
                                                                     1980
gtgccactgt tcagcggagc tgactggttt ctcctggtag agggccggct gtatcctqac
                                                                     2040
agatgcctgg tgagcagggg aagcaggacc cagtggtcaa caggtgtctt taactgtcat
                                                                     2100
tgtgtgtgga atgtcgcaga ctcctccacg tggcgggaat gagctgtgta aatacttcaa
                                                                     2160
taaagcctga cttcacatct gca
                                                                     2183
```

```
<210> 3239
<211> 2483
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2421)...(1347)
<223> similar to gi3165570 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3239 gagtgatacc tgactcctcc agaacccttc agggcaggca ttttattcat catttatttt 60 aaaaataact gggagtcaga aacagatgct aagaggaggc acattcttca agttttctaa 120 aagaaccctt tctactttgg ataggacaaa aatgagcttt ggctgaatga actgagacta 180 gacataagaa ggactgagct gctgatgagt tatgaatgga agactaacac gcagtctcaa 240 ggcaggagaa gaagaacatg tgctgttttc ctgggagtgg ggcaactggt ggtggctgtg 300 agaaggcaga gctcttcaga ggggacagcc aagaacaggt agtcactggg ggccctattt 360 agcctgagaa tgcaggaggg attgttttat ggggtcctcc ctgcccctca agacaccctt 420 ccgccccatc cccacaccag ggtgctagag aagataggaa tatagatttt aatcattgtg 480 ctqctqctat taaccagagt gcaattaatc catcttttgt ggattttgat gccacagtgt 540 aaatgagagg gtttcacaca gaaacactct gggggccttc ggtgacaaaa gggctaggcc 600 tctggtgggg agggggtggc aaaaggtgaa gtggaattag gagagatgtg gggagcagac 660 ccagggctgg gagactgctc cttccccatc acacatgccc atcaaggacc ccaagaggaa 720 gggattette etgecatgge etgggetgte caagtgagee tgaetteeet tecaaggeag 780 ctgcctctag cttcatgtcc aattctcgct gagtagatga ggtccagggt aggcccacag 840 ttgaccacca aatggtgaag agatataagc caagggagaa gaaagtggtt tggaaccccc 900 aatcattctc catttttcat cctaagctac cttaaaacta gttcagagct ggggaaagac 960 agcaacagca gtctatcctc tcggtcagaa ctgctctacc tgcctcctgg agatgggggt 1020 ggggggaggt gggactcaca ggagggagag gtaggaaata ttcctgtgcc tttctttgcc 1080 tgtgcagtaa gtgaagactc tcttcagagt cagctctgca gctggtggag tcatctgtgc 1140 ctcttacagt tttctgagat tggtaggatt tggagctata gagaggtcaa cttagagccc 1200 caaggccaga ctccactggt tgctaacagg agctgacatt cttggaagta gccccgactg 1260 cttggacaag atcattcctc atgttaagag tgaagtgata tggtccaggg caaaggtact 1320

```
gagcccagag acagctagga gtcagagaca cacagggcct ccactgcgtc actcagaccc
                                                                     1380
tggttgacac ctcccacggc gaggaggcag ttcttgacga ctatqctqqa qcaggcacag
                                                                     1440
cggggtgtgg gcatggcagg gaggatctcc catttgttct tccctgggtg gaatgcttcc
                                                                     1500
gccgtctcca ggacagtggg ttgattccca agtcccccag ccactatgac ccgtccactc
                                                                     1560
agagagccag ccacaaaatc tgcccgccgc ttcttgagga agaacgatcg ttccatcttc
                                                                     1620
agccatcccc cctgttccat gtcgaacacg tccatcgtcc gcaggaactt gggctgccgg
                                                                    1680
tagaggcgac cttgccgcag gcctcctagg ctgtacaagt ggttgtccag ggtcacaaag
                                                                    1740
ctggagaagg cccgcttata gggaatgttg ggaaacttgg tccaggagcg agtctcgatg
                                                                    1800
tcaaagacct cgaaagcgtt gaccgcgtac ttggactgtc gtccccccag cacgtagatc
                                                                    1860
ttqqaqcctc ggaggaagga ggtggcagca tatctcgggg tgggcatggg tgctagggac
                                                                    1920
acceacatgt cetteageat gteatagtgt tggaggtggt tgtgtgqaeq taggteeaqq
                                                                    1980
cccatcccgc ctgccgcata tactcggtaa tctttggccg tgacagaaat gcccatggcg
                                                                    2040
gcctcacgca gcatgctcct cttcttccac ttgccctcat cgatgttgta catctccacg
                                                                    2100
accttcaggg gcagctgatt ggtgcccacg cccccaatca ccatgatccg cttccccagg
                                                                    2160
gcggtgacgg ccaccccgc ccgggctgtg ggcagccggg gcaaggcggt ccactggtcg
                                                                    2220
gcctccgggg agtagacctc gaagcagtcc atggggacgc cgttgtcgtc acatccccg
                                                                    2280
atggcataga cctggccccc ggtctccagc agggagcagt agacccggcg gctgggcagt
                                                                    2340
ggcgccaggc gcttccactg gaagtccttg acgttaggca cctccatggc agccttgggg
                                                                    2400
agcgcccggg cgccgggaga gttgcgagcg cgggggtcca ccggctactt ggcgccggct
                                                                    2460
cccacggccc ctatcgcact aaa
                                                                    2483
```

```
<210> 3240
<211> 2451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(1567)
<223> similar to gi2827886 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3240
tttcgtcacc caggcagtcc ctgacgtgtc ggggaggagc cgggcgcgga ggtacgctga
                                                                       60
gtggagctcg gggctgcgta ggggagctga gccgagcggc tgggcgggcc tggccgggcc
                                                                      120
agcggagggg agacgtcggt tgagcggcgg cgaacatgcg cttttgacac attggaggct
                                                                      180
ttcttgatca tggatggtga agatatacca gatttttcaa gtttaaagga ggaaactgct
                                                                      240
tattggaagg aactttcctt gaagtataag caaagcttcc aggaagctcg ggatgagcta
                                                                      300
gttgaattcc aggaaggaag cagagaatta gaagcagagt tggaggcaca attagtacag
                                                                      360
gctgaacaaa gaaatagaga cttgcaggct gataaccaaa gactgaaata tgaagtggag
                                                                      420
gcattaaagg agaagctaga gcatcaatat gcacagagct ataagcaggt ctcagtgtta
                                                                      480
gaagatgatt taagtcagac tcgggccatt aaggagcagt tgcataagta tgtgagagag
                                                                      540
ctggagcagg ccaacgacga cctggagcga gccaaaaggg caacaatagt ttcactqqaa
                                                                      600
gactttgaac aaaggctaaa ccaggccatt gaacgaaatg catttttaga aagtgaactt
                                                                      660
gatgaaaagg aatctttgtt ggtctctgta cagaggttaa aggatgaagc aagagattta
                                                                      720
aggcaagaac tagcagttcg ggaaagacaa caggaagtaa ctagaaagtc ggctcctagc
                                                                      780
tetecaaete tagaetgtga aaagatggae teegeegtee aageateaet ttetttgeea
                                                                      840
gctacccctg ttggcaaagg aacggagaac acttttcctt caccgaaagc tataccaaat
                                                                      900
gqttttqqta ccagtccact aactccctct gctaggatat cagcactaaa catcgtgggg
                                                                      960
gatctcttac ggaaagtagg ggctttagaa tccaaattag cagcttgcag gaattttgca
                                                                     1020
```

```
aaggaccaag catcacgaaa atcctatatt tcagggaatg ttaactgtgg ggtgctgaat
                                                                     1080
ggcaatggca caaagttctc tcgatcaggg catacatctt tcttcgacaa aggggcagta
                                                                     1140
aacggctttg accccgctcc tcctcctcct ggtctgggct cctcgcgtcc atcgtcagcg
                                                                     1200
cegggtatge tgcctctcag tgtgtgagtg cctagcctcc aggtgggggc tcctgcctc
                                                                     1260
ctccaacaac ccaggacacc cacgcctcac ccctcggtgc ctgggcccag ccccgtgccc
                                                                     1320
ctccgtctgc ctccgcacgg ctggcagagg gcaggctgca tgcagtggcg gctactgggc
                                                                     1380
cctgcccagc cccggaactc tgcgcgatat caatactggc tattttctct tctcgccgta
                                                                     1440
gtgccgttgg tttcacatga ttgcactttt gtgggtcgca aggtgataca tacgtgtatt
                                                                     1500
acttggtcac tggatgcaga agtacccatt catcacacct gccccatagc ccccactctg
                                                                     1560
ctgtactgat aggatttagt tgtgttttag gacattgcaa atcttctaga agttctcccc
                                                                     1620
caaatcaggt caatgtgtgc cctcctgagc tcccacccag gcatctccag tqctcatgat
                                                                     1680
catgtgtccc ccaactccac ccctcacagt ttgggcctgt ttctggcaaa gagtcaggaa
                                                                     1740
ggttactgaa ttagggaaca ttttctgcac cttctgattt tacttaagca gctaccattc
                                                                     1800
catggacttg cctcccagag cagcacaatg cccgtctgag ccccacgtgg caggagcctc
                                                                     1860
tgggacgggg cacacacagg cccagcctct gtgctgtctc ctcctctgtg cgcctcagac
                                                                     1920
teggggtgag ggaggeggge ageetetege cageetteee gteetteagt teaacgaeat
                                                                     1980
ctttggagtg tttttgtttt ctcttccaag ggccgtcccg ttgtgttagg aagggtgagt
                                                                     2040
ggctggttcc agggtgggcc ggtgccagct ccggggtgga ctgaacagcg gcggctgtcc
                                                                     2100
ctgtgcatcc tttgattact ctcatgctgc atttactgtt tacatttgtt ttattgtaca
                                                                     2160
taggtttgta aacattattg cctgagatat ttgtatataa cttgggcttt gtagctttta
                                                                     2220
tttattcaga acgcatacgg catgttaatg actctgatgg tgtcctcctc tgggcagctg
                                                                     2280
tataggatca tcatgtggtt acaaaaaata cttccctcaa aaaaattctt ttaatgtgga
                                                                     2340
aacaataaat ttcacagaaa aaaaaaaaa gggggggccg ttttaaagga tccttggggg
                                                                     2400
ggcccaagtt tacccgggct tgcaaggtaa tagctttttc cttataggga g
                                                                     2451
    <210> 3241
    <211> 1124
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (360)...(926)
    <223> similar to gi5478530 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

```
<400> 3241
gtccggagtt cccgggtcga cagtctccca gaacaattcc caggagctcg gattccaaga
                                                                       60
gccgcccttg ccctcgttta ccttcgctag tcgccctgca gccccgccct gtccggaggc
                                                                      120
eccgcectee atgaatcage tgatecegeg gacecaetgg gttgeeaage tegegeegga
                                                                      180
tgcggagcgc ggtgctgccg gtggagcttc aggtcttgat agactttctg taaagaagga
                                                                      240
atgatttggt gatggagtgt tcccactgac cgatggactc aaagaagaga agctcaacag
                                                                      300
aggcagaagg atccaaggaa agaggcctgg tccatatctg gcaggcagga tcctttccca
                                                                      360
taacaccaga gagattgcca ggctggggag gaaagactgt tttgcaggca gccctcggag
                                                                      420
tgaaacatgg agttcttctg actgaagatg gtgaggtcta cagctttggg actcttccct
                                                                      480
ggagaagtgg accagtggag atttgtccaa gtagccccat tctagaaaat gccctggttg
                                                                      540
ggcaatatgt tattactgtg gcaacaggaa gcttccatag tggagcagtg acagacaatg
                                                                      600
gtgtcgcgta catgtgggga gagaattctg ctgqccagtq tqcaqtaqcc aacccqcagt
                                                                      660
atgtgccgga accaaatcct gtccgcattg ctgattctga agccagccct ttgttagcag
                                                                      720
tcaggatttt acaaatggcg tgtggcgagg agcacactct ggcattgtca ataagcaaag
                                                                      780
```

```
agatttgggc atggcgtacc ggctgtcaat tgggtctcat taccactgcc tttccaggga 840 caaagccaca aattgttgaa catcttgčtt ggcgagaggc gctctcaact gcctgtgggg 900 cttccacaat taggccttgt tcaatgcctc ccttccaggt attgaagcag tcccaaaacc 960 atgcaacaat gcactccct ttgagtacta ttactgacaa aaatcacctg gaatttttgg 1020 accgcgttgg tggcccttag ggggacactg acaaaccttt ggagaaagac atgcggctt 1080 gtcttagccc ctcactggaa ccctcacggc agaaaaaaat tgct 1124
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1174)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (50)...(1023)
     <223> similar to gi915208 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3242
tttcgtgggc tctggactct gtatctggaa ctggtggcgt cggcccaggt cggcgggaac
                                                                       60
cccctgaacc ggaggtacgg cagctggaga gaactggcca aggctctggc cagcaggaac
                                                                      120
attccagctg tggatccaca cctccagttc taccatcccc agaggctgag cctcgaggac
                                                                      180
cacgacattg accaaggggt gagcagtaac agcagctact tgaagtggaa caagcctgtc
                                                                      240
ccctggctct cagagttccg gggccgtgcc aacctgcatg tgtttgaaga ctggtgtggc
                                                                      300
agetetatee ageageteag gaggaacetg cattteecae tgtaceecca tattegeaca
                                                                      360
accetgagga agettgetgt gtececeaaa tggaceaact atggeeteeg catetttgge
                                                                      420
tacctgcacc cctttactga tgggaaaatc cagtttgcca ttgctgcaga tgacaacgcg
                                                                      480
qaqttctggc tgagcctcga tgaccaggtc tcaggcctcc agctgctggc cagtgtgggc
                                                                      540
aagactggaa aggagtggac cgccccggga gagtttggga aatttcggaa ccaaatttcc
                                                                      600
aagccggtga gcctgtcagc ctcccacagg tactacttcg aggtgctgca caagcagaat
                                                                      660
gaggagggca ccgaccacgt ggaagttgca tggcgacgga acgaccctgg agccaagttc
                                                                      720
accatcattg actccctct cctgtccctc ttcacaaatg agacgttcct acagatggat
                                                                      780
gaggtgggcc acateceaca gacagcagec agecaegtgg acteetecaa egetetteee
                                                                      840
agggatgage ageegeeege tgacatgett eggeetgace eeegggacae eetetatega
                                                                      900
gtgcctctga tccccaagtc gcatctccgc cacgtcctgc ctgactgtcc ctacaaaccc
                                                                      960
agetatetgg tggatggget teetetgeag egetaceagg gaeteeggtt tgtteatetg
                                                                     1020
tcttttgttt accccaatga ctatacccgc ctgagccaca tgggagaccc acaataaatg
                                                                     1080
tttctaccag ggaaaacgcc tacttaccaa gaccggtgag agacactgag tnggggcagg
                                                                     1140
gaaggtgacc ttgcagaggg tctgcgggac cat
                                                                     1173
```

<210> 3243

<210> 3242 <211> 1173 <212> DNA

```
<211> 1308
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1305)...(947)
     <223> similar to gi2707600 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3243
gtcgacgatt tcgtgtgcgt tcactcatgg gctggatcct cacgccctcc tgccctggca
                                                                       60
gettgetgee egecateeet ceateaaaat caaagetetg atgeateett eegtgggaet
                                                                      120
gcaggtctct gtagccaatg gggttgctga gctggtggag gtttccctcc atctcctggt
                                                                      180
actgctgggc agagagcagg ctgcgaactg actctqcqct ccqqaactqc atggacqagt
                                                                      240
taagagtgcc catgttgctc agcttctcag acacattcat tccagagtct ttgctgaggt
                                                                      300
caggcatgga aaatcgggat aggtgctcct ggcgcttggc accaccatca gcagagagc
                                                                      360
ctgttgcatt agacagggcc agggattcca tggagccccg aggggtctqc tctgtqqqcq
                                                                      420
tcatgtcctc tgtgtatttc agggaactga tgggatgacg ggtccgacac tgctgagtgg
                                                                      480
acaageeeee tteetettee tetteeteee atatttgggg aettggatge tgeetegggt
                                                                      540
ctcactgaaa ctctgactag acatatcact gtagctctcc tgagatctca gcctccccgg
                                                                      600
gtaatagtet teteggeatt eettgatgaa getgeeagea tgteetgtea tggeeagtga
                                                                      660
egageteett ttggggttge tgaagtgett geeceaeatt tegggetggg eeceageece
                                                                      720
ttgccctcct ggactgtagg aagttctgat gttgcactgg ctgaggagct gcagagggct
                                                                      780
ctgggtctgg ttctgctcca tcttgttccc ataatggtag ggctcttccc ggctcctcca
                                                                      840
gatggggtcc cggttgaggc tgggtgtctg gctggacagg ctgagcatgt ccatctgcag
                                                                      900
tgacaggggg tctacgtcgg ctgacagccg gttagaactc acttgcagct gqctgtqctq
                                                                      960
gttcagcatg ggctcctccg tcttgccctt gttcttgcca attttggcac tgcgccggga
                                                                     1020
ctccttggcc ctggcattct ggaaggcgga atcagaggag tcagaaccat tggggtcttc
                                                                     1080
eccageacty caggeeeegt gageagaata tetggeeetg ettegggagg aatggeegee
                                                                     1140
ccaggaggga tttcttgcag tgagcacagc agaaacaggt ctcagtggca tgccagtgtt
                                                                     1200
ggccgtcata ggtcatttga ccttggtcga tacctatatg ttgggcacag gcgtcacaat
                                                                     1260
attotgcata ccaggactcg aaacagtggc gacagtaggg gcttctct
                                                                     1308
    <210> 3244
    <211> 1204
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1205)
    <223> n = a,t,c or g
    <220>
    <221> misc feature
    <222> (3)...(645)
    <223> similar to gi643656 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3244
cccccaactg gaaacgaaac ccttccctct tttgaaaggt tttccccctn atgaaaagg
                                                                       60
tggtgcaaga ggatccctcc tacctcccaa gtccctggac tatgaccgct tcagccgcaa
                                                                      120
cqaaccccat tgggaagggt gtccatcccc cttaacaagg tggacctgac ccagatgcag
                                                                      180
accttctgga aggatctgaa gccatgcagc gatgggagtg ggagccgagg ggagctgctc
                                                                      240
ttgtctctct gctacaaccc ctctgccaac tccatcatcg tgaacatcat caaagcccgg
                                                                      300
aacctcaaag ccatgggaca tcgggggcac atcagacccc ttacgtgaag gtatggctga
                                                                      360
ttgtacaaag gacaagcggg tgggagaaga agaagacggt gacgattgaa gaggaacctg
                                                                      420
aaccccatgt ttcaatgagt ccttcgcctt cgatatcccc acggagaagc tgagggagac
                                                                      480
gaccatcatc atcactgtca tggacaagga caagctcagc cgcaatgacg tcatcggcaa
                                                                      540
gatctacctg tcctggaaga gcgggccagg ggaggtgaag cactggaagg acatgattgc
                                                                      600
ccgtccccgg cagcccgtgg cccagtggca ccagctgaag gcctgagtgg ggccaaggga
                                                                      660
ggcccagggg gccgagggcc caggtcccca tcatgccctc accactttat gcacaacgcc
                                                                      720
eggeetgage eecetgeeat agggagggga ggaeeetgag qqeteaqeea qqqaqqqte
                                                                      780
ccaggactca actgggcccc gtttctagga agtaccagcc ccatccccca cagtccagct
                                                                      840
ccggggaagg ggctctggga ggcattttcc tgctttgccc cttttcttcc tgacttacta
                                                                      900
atactaaaga agttggggga gctcgagagc cagacggcca gacaggcaga cccctccaga
                                                                      960
ggcccgccca ggtgggcatg gtcccccatt ttctttaagg cagcaccctg gagtggagag
                                                                     1020
aggccactcc ctctccagcc cccgatgtgg acccggggag gggaggctga ggcgtttggc
                                                                     1080
cccggcctgg ccaggagagg cccatcccca gggcagtttc aggtgccggc tgggccctga
                                                                     1140
atgtcgagga taggcatata gcccgttgct gcggcatgga ggtggtgccg ttccacaatc
                                                                     1200
                                                                     1204
     <210> 3245
     <211> 988
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (940)...(636)
     <223> similar to gi3002527 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3245
gtccgattct cgggagacac gcgtcgttat taacctaaaa gattctgtgt tttgtctata
                                                                       60
ttgcaaactc tttggggaag gaaaaaatca actgaaaaat gaaaatgggt gcaaagattg
                                                                      120
gcaacattta tcacatattc ttagtaaaca tgaagaaagt gaaatgcaca tcaacaatag
                                                                      180
tgttaagtac tcaaaattaa aatctgatct gaaaaaaaat aaagctattg atgctgcaga
                                                                      240
acgcaaatta tatgaaaatg agaaaaatga tggtgtgctg ttgttgtaca cgtaatatac
                                                                      300
ctgagttgtt ttttggcatg atgatcagaa tcttacatta ctcagaaaac atctgtcctg
                                                                      360
caatagtcag tactattgtg ttgtaagtct cctctacaga gtaacttgca gcagttcctt
                                                                      420
agcaataagt atgatagcaa ataaatagca aagaatgttt ccattctaaa tctaaaacta
                                                                      480
attagattca atcatcatta ggcaatgact tcattaggca atgaagatta acaataggta
                                                                      540
attgttaatc ttcaaaatct atcaatttac acctatttaa aaattggcat ttaatgactg
                                                                      600
ccatttgatg ggtttggtta atattctgtt cttggccggg cgcaatggct cacgcctgta
                                                                      660
atccaagaac tttgggaggc tcaggcgggt agatcaattg aggtcagaag ttcaagacca
```

720

```
gcctggccaa cgtggcaaaa cctcgtcttt actaaaaata caaaaattag ccaggtgtgg 780 tggcacacac ctgtagtccc agctactcag gaggctgagg caggagaatc gcttgaaccc 840 aggaggcaga ggttgcagtg agctgagatt gcaccactgc agtccagcct gagcaacaga 900 gcgagagtca gtctcaaaag aaagaaaaat attatgttct aattaccttg aaagaggaaa 960 gaaaggcttg aattgatcaa taccagtt
```

```
<210> 3246
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1234)
<223> similar to gi4405795 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3246 ggaattcaaa tgtatgagca gcaggtggtg aagctgagtg aggctgcggc tttggttggg 60 ctttaggage aacgggtgta tgcgcttcac ctgaggcgct acaatgacgc gctgctcatc 120 180 cacgtcacta aaacccagat cctgtgtgcc gagcgccggc tgctggccct gttcgatgac 240 cgcaagaatg agctggccca cttggcaact catggcccag agaatccaaa actggagatg 300 ctggaaaaga tcctgcaaag gcagttcagt agctctaaca gccctcgggg tatcatcttc 360 accegeacce gecaaagege acaetecete etgetetgge tecageagea geagggeetg 420 cagactgtgg acatccgggc ccagctactg attggggctg ggaacagcag ccagagcacc 480 cacatgaccc agagggacca gcaagaagtg atccggaagt tccaagatgg aaccctgaac 540 cttctggtgg ccacgagtgt ggcggaggag gggctggaca tcccacattg caatgtggtg 600 gtgcgttatg ggctcttgac caatgaaatc tccatggtcc aggccagggg cgtgcccggg 660 ccgatcagag tgtatacgcg tttgtagcaa ctgaaggtag ccgggagctg aagcgggagc 720 tgatcaacga ggcgctggag acgctgatgg agcaggcagt ggctgctgtg cagaaaatgg 780 accaggeega gtaccaggee aagateeagg atetgeagea ggeageettg accaageggg 840 cggcccaggc agcccagcgg gagaaccagc ggcagcagtt cccagtggag cacgtgcagc 900 tactctgcat caactgcatg gtggctgtgg gccatggcag cgacctgcgg aaggtggagg 960 gcacccacca tgtcaatgtg aaccccaact tctcgaacta ctataatgtc tccagggatc 1020 ctgtggtcat caacaaagtc ttcaaggact ggaagcctgg gggtgtcatc agctgcagga 1080 actgtgggga ggtctggggt ctgcagatga tctacaagtc agtgaagctg ccagtgctca 1140 aagtccgcag catgctgctg gagacccctc aggggcggat ccaggccaaa aagtggtccc 1200 gcgtgccctt ctccgtgcct gactttgact tcctgcagca ttgtgccgag aacttgtcgg 1260 acctctccct ggactgacca cctcattgct gcagtgcccg gtttgggctg tagggggcgg 1320 gagagtetge ageagactee aggeceetee tteetgaate ateagetgtg ggeateagge 1380 ccaccagcca cacaggagte etgggcacce tggettagge tecegeaatg ggaaaacaae 1440 cggagggcca gagcttagtc cagacctacc ttgtacqcac ataqacattt tcatatqcac 1500 tggatggagt tagggaaact gaggcaaaag aatttgccat actgtactca gaatcacgac 1560 attectteee taccaaggee acttetattt tttgaggete etcataaaaa teaatgaaaa 1620 aatgggatag aaaaaaaaa aa 1642

```
<210> 3247
<211> 1789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1784)...(1123)
<223> similar to gi1050797 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3247 tttttttttt ttggagcatt ccaaatttat tccttttaag gaaacctata gccactacat 60 atgtccctga caattagacc agaaaccaaa aaaaggacaa atagaaatac tttccattct 120 gtctatatag tagtagtttt gggggtatag atagtaaaca ctagtcaaga atactcgtct 180 aaatatgttg gtaaaatgta gtcatcattt ggcatgtgtt ttgctttggt atataatgaa 240 gttgagctat cccatctttc ttctctatgg aatatagtca cacaaacaaa aaagatgaat 300 ctcactagag gtgggtcttt atcagaaata tgccccaatc tagttaggta atagaaagaa 360 aatcattttc tcctcctagg cctaagattc ttcatgtaaa aattataaga ctgaataaag 420 atcacttcta agtttctata attcatgtag atatatcaat ttatacatca tgatgtagac 480 agacagcaag gctatacttt ctggctccat gatgctaggc ttggccacat gacttgctta 540 aagcacgtat gatacatgca tcttttaaga gaaaaccgaa gtgtatttca tctctttctc 600 tctctgctaa aacaatcaca atgtcccaaa agagatccct tccttcgcct ttgatcatgg 660 taagaagatg acacaaagca gtgtcacagc caatcaacag ctgacatccc ccaccaggaa 720 atacatcttt gttgttgtca ctacagcata aactaatgaa agctaattaa atataagaat 780 ttgctaataa ttgaggatcc gtacacaatt aaacttaaaa ccaaaaaact ctaatagaaa 840 actcataatt taaaatgtga cataagggga aataagttaa aaagcaactt ttaaaaatta 900 caaaaatagt atttgtagta aaataaatgg acttaaacat gtaatagaat tttccctgtg 960 atttctgact tgaatctttg aatgactatt ccaagtaaga ttcaacattt ttacagaatt 1020 gttcttcatc attaagatat tccaagatta tatttccacc attatataaa ggacaatcct 1080 ccttagcaat ccaggtttcc aaagtatgat ccaagggtaa ggcttctcct gaagtaatgt 1140 gacacageet taatttetta getgtaaatt tgttattgte atttttaage etggetagag 1200 aagcggcaaa gtctatggcc tttccaatgc tccatcggtg gcaaaagaac attggtttgc 1260 tcttctcttt gctcccttta ggtaagaaaa cctgaaagta aattctttct gtctgtggta 1320 atgacttatc gccatcagca tgcatcttta atttcatcaa tgcaaccttt gcagctgttt 1380 cactattttt ggcacctttc catcgtttac ttgctgtttc tcctgtcttg gaatcaataa 1440 tgtctttaac aagtttctga gtggcagcca ttcgaggctt tgggatttcc agtttttcac 1500 actcatgatc tgactgatga cggtgtctca ggcaaaaatt cttctcacaa taaggacata 1560 taactgccac aagttetete teageacagt etttgaaaga geatgggtaa gatgtatgtt 1620 gatctgtctt cagtctctca ttgattacag tcacctcagg acaaccatga gactccctgc 1680 ttctgtgttc aaggcaaaat attcctgaac aatcatcaca cacaaatgga agaaaatctc 1740 gctgccggca atgctccacc tggcagtgct gcccgatgtc caactccgc 1789

```
<210> 3248
<211> 2352
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (1)...(1238)
<223> similar to gi36603 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3248 cggctccggg agctctgtca acagtggcta cagcccgaga cccataccaa qqaqcaqatc 60 ctggagctgc tggtgctgga gcagtttctg atcatcctgc ctaaggagct ccaggcccqg 120 gtgcaggagc atcacccaga gagcagggag gacgtggttg ttgttctgga ggatttgcag 180 ctggatcttg gagaaacagg acaacaggtg gacccagacc agccaaagaa acaaaaaata 240 cttgtggagg agatggcccc tctgaaagga gtacaggaac agcaggttcg gcatgagtgt 300 gaagttacaa agcctgagaa agagaagggt gaggagacaa ggattgagaa tqqqaaqctt 360 attgtagtaa cagactettg tggaagagta gagteatetg ggaaaatate tgaaceeatg 420 gaggeteata atgagggete taaettggaa aggeateagg eeaageeeaa agagaagatt 480 gagtataaat gctcagaacg tgagcagaga ttcatccagc acttggacct gattgaacat 540 gcgagtacac acacgggaaa gaaactctgc gagtctgatg tgtgtcagag ttccagtctt 600 acaggacata agaaagteet etettaggag agaaaggtea tecagtgtte atggagtttt 660 ggggaaagcc tttcagagga gttcacacct cgtcagacat cagaaaatcc atcttggtga 720 gaagcettat cagtgeaatg agtgtggeaa agtetttage cagaatgeag geettttgga 780 acatctcaga attcatactg gagagaaacc ttatctatgt atccattgtg gaaaaaattt 840 taggcgcagc tctcacctta atcgacatca gagaattcac agtcaggagg agccctgtga 900 gtgcaaggag tgtggaaaaa cctttagtca ggccttactc ctcacccacc atcagagaat 960 ccatagtcac tccaaaagcc atcaatgtaa cgagtgtgga aaagctttca gtttgacctc 1020 agaccttatt cgacaccaca gaattcatac tggagaaaaa cctttcaagt gtaacatatg 1080 ccagaaagcc ttccgactaa actcacacct tgctcagcat gtaagaatcc acaatgaaga 1140 aaaaccctat cagtgtagtg aatgtggaga agccttcagg caaaqqtcaq qtctttttca 1200 acatcagaga tatcaccaca aagacaaact ggcttgatga ggtgttctct ccttgtagaa 1260 catcagagaa ggcacattga ctagcaaaca gcactttagg aaaagtcacc gtagcccact 1320 gtggcatcag aaaattettg ggggetgagt tggaggetee etgeetetat teteteteet 1380 ttgctttcct tgaagtcagc tttggaccac aataatttca ctgtagatga tatgctagga 1440 tcaaagttaa acagcattct tcactgcagg acatctcaga gcatgtaaca taactgcatg 1500 attatatact ctaagcaata gagagcttca tgactgagta agagttttga agtcagcagt 1560 gaatcaagtg cccacagatt tgcaggctta agcagaacaa gggaagattg atatttttqg 1620 atatgctata gcagctttct cctatgaaat aaaactgatg atgtttggaa gtatactact 1680 ctcaaaggtg tctttaaagt acaggttaat ggtgaacatt ttcccccagt ggcttcacct 1740 catteeteee actggeetta eccetteett eeccagtgga ageattttea aaageaaaga 1800 taattttcgc tggtgaactt cagaacttgc cttcagggtt agcttcatgt aattttacca 1860 tttcccatcc ccattcccca ccacattatg tcaagattca agttataaat taacqtttta 1920 cttagacttt gaaagagatt tcatgagtaa tttgaatgaa ccttgctgaa ttaatctgaa 1980 taqcaactqt ctqacttgat aactccagtg ccagtatagt ggctgctgca tagacactat 2040 tcagtaaatg tctgatgaaa gaaattggac tttttccctt taatactgat gatgcaattt 2100 tgaaatgttg cttgttctgg aatacttcgg aagttaaaca ataaagtcag cttggagagg 2160 agatcatgat ctttatactg tgaatagcag aatgtcacag atgaagaata ttaaaattag 2220 gggcgtccac tccaaaacat atcaccagag tgacaacttc agccctcagc ctctgcaatc 2280 catatatatc ctggtcttgg gagtccatag aatactgttt ccttctaata aaggtttcaa 2340 acaaaaaaa aa 2352

<210> 3249

<211> 5039

<212> DNA

<400> 3249 agacacagat teccaagtee gtagttgtaa atageggeea qaggetagta taataceace 60 cccccttagt aagaagtaat gcgttgcctg cacgggtaaa attggggccc ccgaagggtc 120 180 agtattaagc atgattaaac cagtgcagaa aaataccaag tacattgggt gaacgatgag 240 ctagctgttc tagtatttgc tttttgtaat ccagttaaga ccatcagcat atacaacctc 300 atctctaact caacaatgta gctgcagggt aacatgtgga taccctgtgt gctctactgg 360 cctccaaagg cattcagggg atcctcaaag atgttgggcc ccttgtgttc aaatcttggt 420 tcaggtgcgg cctgtgcaga tcggcttttt ggtttnggtt ggtcttaagc ctggatactc 480 agaggagaaa gatgtcnatc catatcatca tcanaatata gaactcatga agtataatct 540 ctcaccttct ttctctttcc cctgcccagg ccctaagtta gggttcccat ccatataaca 600 aagacttctg gtcaggtggc atttgctatc tctgggattc cctgcccatg aaagccacaa 660 agagatttct tcttttacac accctgaagc atattatggc cccagcaagg ctaactaaat 720 780 agtattaagc atgattaaac cagtgcagaa aaataccaag tacattgggt gaacgatgag 840 ctagctgttc tagtatttgc tttttgtaat ccagttaaga ccatcagcat atacaacatc 900 atcactaact caacaatgta gctgcagggt aacatgtgga taccctgtgt gctctactgg 960 cctccaaagg cattcagggg atcatcaaag atgttggaca ccttgtgttc aaatcttggt 1020 tcaggtgcgg cctgtgcaga tcggcttttt ggtttggttg tcttagcctg gataccagag 1080 gagaagatgt catccatatc atcatcaaat atagacttgg cttccacttt ctttttggac 1140 ttttcctttg gttttacagt taagtcagca aagatatcaa tgttatcatc aaataaatta 1200 gattcccaat gttttctcct tctctctggt tttctgagag ggtttaattg cttccgtagg 1260 caaaatatat catccttgtt aagcctcaaa aatatcgttg tgttgttaat atgacatccg 1320 tgctgactat tgggattttg tctcattctt cttgactttc tgatctgtaa agggggtcat 1380 cctcatcttc caggagagga aagggatttg ttttctttgc tggttttggt ttagcagact 1440 gaaagagatc atcatcactg ctggcctcgc ctagagcagg aaacatgggg ctctttgctt 1500 taccacceae tggtgggttg geaggattet etgetatett tgeettgggt tttgttetet 1560 ccacagactg agatecagtg cccgtggaaa agatgteecc agaateaaaa aggteageet 1620 cccctctgga atgacccaga gactttgcaa aggggcttct gtccactcca ggcacaggac 1680 caccttecca aggtgcageg geagetgeea gggeeteete agtgetgtet tetecaetgg 1740 ctgctctgag ctgtggccga tggccatttg gggaaatggc gccatcagcc cactgtgcaa 1800 tgggtcctct ggggacgctc atgtcctcag tctcgctgga ctcctgagca gccagccqcc 1860 tagctgcacg ggtctgcggt ctacgcttcc ctctcatctt gacacggctc ttgtttgcac 1920 tgtgtaaggt gtctgcctga gctggaagat caaaactcac accggcctcc ccactcccgg 1980 gaaggacagg cacactttcc agaccgtggc tccttctgtg ttcagatgaa ggaaaagcca 2040 attetggeaa aacaggettt aetteagaga tetgggaage egetgtggge ageaaggeeg 2100 ctgggttgat cgctaaattt gcctgaggtg tttccggctt ccatatgcct ttttctttac 2160 taccttgaat ggattcagga tgtttctggt ttttgaaaga gtcaacagag tggtcttttt 2220 tcactactct ctttttctct tgtaccaaag gctgggactt ggcagagctg aaaagatcat 2280 catetteate atececaaae aggeteeeaa eaettggete taacagettg gtttttttgg 2340 tgccagcaaa aaggtcaaca tctgggtcat tgtccttttg gagcttgtgg ctgaaaagca 2400

```
getetteate etggaagaea eetgtgetet tggggtggge ateaggaate geageeettt
                                                                     2460
cctacttctt ttctgtggag cctgggataa tggttttgaa tcttccaatt ttatcctctt
                                                                     2520
cctcatcaaa caagctaaga acagttttgg ttcttaggct tqqttccttt qtcccatqqq
                                                                     2580
gatgatgaag aaaataaatc agaatgcttg actgtttcct gagcagatct agtcaaaagt
                                                                     2640
ccttcctttt ctgactcagc cacatcagtt ctcccaaatt ttaatgactc cttggcactc
                                                                     2700
tcaaccttct tatccacaga cttcactcca agttgtgcct ccttctcttc ttcatcgctg
                                                                     2760
aacagcaaag gtggtgcctc agagacagtc tcttttttct ttgttgcagg aggaacagat
                                                                     2820
gtgggaggag agccaaacag agagcctccg ctatcaacat cqtcttcaaa qaqqaqtqac
                                                                     2880
actetetggg tettettttg getgteettg geaatggeaa aaagateate ttettegtet
                                                                     2940
tcctcaaaga gactggtctt tttcacagcc ttggcctcct ggctctggag ggtcccagaa
                                                                     3000
teeetgggtt eteetttaga eetgetgtea gatgetaagt gggtetgtga ageaggaata
                                                                     3060
ttccactggt cctcctcatc actgctgaac aacagggcag atgctttctt tttggagagc
                                                                     3120
teggaggett ttgetttete ttetetetga gettgtagae acaatgtetg ettettagea
                                                                     3180
gctgtacccc caaaaagatt atcctcttca tcttcatcat caaacaggga aaccgacgtg
                                                                     3240
gggagcttgc caggcagcag agatgcacct tttaagttac tcgccctttq aqaaqaaaac
                                                                     3300
aaatcctcag agtcctcctc atctgaaaat aagccttttt gagtctttgt ttctgatgag
                                                                     3360
ggcttgagat ttttgctgga agataaggta acctttttt ctgctcttgc tttattttca
                                                                     3420
tetgtetgae teacagtgge ttetggegat getaeggett tttetttgaa eagateteet
                                                                     3480
tettegteae caaagatate ggeagtggat tggaetttge gtgttttaga aggtttgetg
                                                                     3540
tggggtgccg agaaaaagtc gtcatcatca tcaccatcat catcatcaaa gaggccagtg
                                                                     3600
ggaggggac cataggggct tttccttgga gtgggctgct caggcttctg tggctccttc
                                                                     3660
agtgatggaa cggaggcagc accaaacaca tccgtgtctc ctaaaaatac agaaacaqct
                                                                     3720
cctgctggga ttttctttcc aggtttggat gatgaagact cctccttaac agaggctcca
                                                                     3780
gcttgccgat cctggggggc ttccgtgaag aggtcactct cctcgtcctc atcatcaaag
                                                                     3840
agccccttgc ccccactgaa caggccacct ccagagccaa atggcgagaa gtcctcgtcg
                                                                     3900
gtcagcttgg ggggtgcgaa taagttatcc tcttcatcgt ctgaaggagt tctcctttcc
                                                                     3960
ttcttctctt tgagtgtctt ccgaggtttt gcttctcctg agggtaaggt tgtcggctcc
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tegtecacte gacceatgge atcecettg atgegggeag ceageteate tgeaaacgat
                                                                     4080
gtaggtctgc ttcttttagg tctagtattt tcttcaatgt cctcaatatc ttcctcctcc
                                                                     4140
ttctcagagt cagcaaaaag gtcacagcca tcatcatct cttcctcatc actcatttgt
                                                                     4200
gtggtgtgct ggttttgttc attgtcactg tgatgggcaa aatcttcatc tgactcctcc
                                                                     4260
tcttctttct cttcctcagt gtccacaata ctgccacgat cactgcctac agagccttct
                                                                     4320
tcactggaca gctctccaag acctacatct tcttgttcca tgaacagctt tgacccaatg
                                                                     4380
agatatggta aaggacgatc aatgtataga tcctttggtt caaggatcag ttccacccqc
                                                                     4440
ccattagcat catcttcctc ggagtctgag tttcctgctt tgatatcaag ttgctcaaag
                                                                     4500
gcactgtcca atacttgtaa gccatagttc acagcctcct ggactttagg aatgagatct
                                                                     4560
acttetttet getetegtgt etteteetge tetgtttttt etgeeteage ettgagtaet
                                                                     4620
ggctcctcca cttcttcatc atatacacga ttctcaatga actgggtatt agagagcata
                                                                     4680
aggaagtcat tgaagacatt atgcaggcga caatctgtgg ctttggtttc ccgaattagt
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ccgtccactt gtttcttgat ttcatgggtc ctagagatag tttgctgtga gaattcctgt
                                                                     4800
agaaactgta gtaggcccgc gtcggccgcc agcgaccagc tctggctgct cctgcggatc
                                                                     4860
tectecateg accaeggeeg eteceacaeg ggeteegaeg etggegeeag eteetggteg
                                                                     4920
ggggtcgtcc ggttcatcat cctagccgcc cggctcggtq ggctccqaaq ctgccaqcac
                                                                     4980
acgccgagga ctgcagagcc ccggaagcct agccccagcc aagctgcccg gggcgtgac
                                                                     5039
```

```
<210> 3250
<211> 805
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(806)
```

```
<223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (615)...(145)
     <223> similar to gi555225 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3250
aacatgcctt aactttgtat gttttataac tttccttact aaaggtacat ttttataact
                                                                       60
ttcttaatat ttcctttccc ttcttcctac ttcatttctt tccttagtct ttctttttgc
                                                                      120
atctttttct gatttctgtc tcttctagtc tctctcttat ttttttctat ttctctttct
                                                                      180
aatgtacaat aattagatga gtgttggtaa caatggatat atgtacatat cttagtttcc
                                                                      240
aaaatttagg gatgtgttta acatctgttt gccacaactg attaggttcc aatcctctag
                                                                      300
ggttaacacc tgtttaagga ggaaacgtgc ctgtcagctg gtaatctggg cattgtagga
                                                                      360
taatttgttt agccagtctc tgggctagtt gaaattgttt agataagttt ctccaatttt
                                                                      420
ggtggaaaaa ttgatgtgat tgggtggctt ggtcaagcag tgatgtcata acctgaaggt
                                                                      480
ctgcttgatc ttgccacaag ccaatgggcc aggcagagat ctgtgggctc aaacgtgtgt
                                                                      540
aataaaaata ggatgtgtac cttggtccgg caattgctga agttgaagaa aaagaggcac
                                                                      600
acagagtggg ctccagagcg aacttaaggc tgtaaaagta atttaataaa taaacagaac
                                                                      660
agcctcagct ctccgaatgc tagtaaattt agatccagtg attggattac gtggtctcca
                                                                      720
ccagactgcc gcttttccat ctttaccgaa ttccaccaca cggtctaaaa gacatcaatn
                                                                      780
gnnnntnctn atagtcttca attcc
                                                                      805
    <210> 3251
    <211> 1240
    <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1098)...(187)
    <223> similar to gi3876090 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3251
tttttttttt ttctaaagct ttatttattt tataaaatgc atagaataaa ttatactagt
                                                                       60
aacattttaa aaattaacat ctttgtattc agcagtcctg ggtcaggagg caggaggagg
                                                                      120
gtggtgggga cgggatggct cacttgggca gctaacccgt gtaggccact tcctcctcgt
                                                                      180
cactgccatc ggggaccgcg tctgtcccaa agtagcggtc gccaaagttc ccaatgcctg
                                                                      240
ggatgatgcg gaaaaaggtc attgacccgc ttgtccaccg ccgtggtgat gattctcact
                                                                      300
cgctggaaat gcataggcca cctgagtgca cgcccatctc tgccatgagc agcgacagca
                                                                      360
aaaagatett gteeteagge aegtegtggt eeaggageae gegeaetgee ateatggeeg
                                                                      420
ccgcgcccgt ggacacggtg cagtccatga ggatcacgtg gtcatcgctg atgtccttgg
                                                                      480
gcagcctcag gtagtggagc tgcgggcagc aggggtcagg ctgcaggtgg ggctccctgc
                                                                      540
gtccccttgc tgtgagctcc ctctgccccc tacccccggg ctcatcaccc cggctgcccc
                                                                      600
caggcacctc gggctccccg gtaagctggt tggtctggat gaggatggtg ccgatgcgca
                                                                      660
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```
cgtctttgca cacagcgcgc agcgcgggct ccatggtttc accggcgcgc agaatggaca
                                                                      720
caccggtgat ctgcggggag gggaggctaa gcgcccacat cccgccccag cagcctgtcc
                                                                      780
cgcgcccagg tgtgcccagg caggtacctg cttccccgca tagcacttgc ccgcatagtc
                                                                      840
ctgcccctgc ggggtctgta cgacgcagtc ctgaaagggc aggaaggaga gcgcgtgctc
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gatgagcagc cgcatcagtc tcttggagta gaagatgaac tcgtcgcgac tggtctcctt
                                                                      960
gtccctgtgg ggccaacagt tgagcgggag cacgcgcccg gggccgcccc gtccccaggt
                                                                     1020
gggccctcac ctgatgatgg tgtgcatgcc ccgtacctgc ggcgtgctct tcaggacgct
                                                                     1080
cagcgtccgg ggcagcggt ggcactggtg tgccgaggcc agcgcagccc tggggacaaa
                                                                     1140
ccgatgggga acactcaaga agggggtctt ttcccagagc cctccctccc cacaggacgg
                                                                     1200
ctgtgcgtca ctgtgagggg aaccctcggc caagctggcg
                                                                     1240
```

```
<210> 3252
<211> 2047
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1541)
<223> similar to gi5689465 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3252 caagaagatg aagaacaaac cagcacccaa cctcataggg caccaagcaa ggaagaagat 60 gatacagtta actggtattc cagtagtgaa gaggaagaag gaagcagtgt caaatcaata 120 ctgaaaacat tacagaaaca aacagaaact ttaaggaatc agcaacaacc ttccacagaa 180 ctcagcactc ctactgatcc aagacttgct aaagagaaaa gtaaaggaaa ccaagtggtt 240 gaccctaggc ttaggactat cccaaggcaa gacattagaa agccttctga gtctgccca 300 ctggatctta gacttgcgtg ggatcccagg aaattgagag ggaatggaag tggtcacata 360 ggctcttctg ttggtggagc aaagtttgat ttgcatcatg caaatqctqq cactaatqtc 420 aaacacaaaa gaggcgatga tgatgatgaa gatacagaaa gagaactgag agaaaaagct 480 ttcttaatac ctttggatgc ctcacctggc ataatgctcc aggatccaag gtcacaattg 540 agacagttca gtcacattaa aatggacatt actctaacca aacccaactt tgcaaaacac 600 atcgtgtggg ctcccgaaga cttacttcca gtacctttac ctaaacctga tccagtgtct 660 tcaatcaatt tacctctgcc cccacttata gctgaccaga ggctaaatag attatggaat 720 acaaaaagtg atcttcatca aaacacagtg tccattgatc caaaattagc agccaaagcc 780 aaaattaaca caacaaacag agaaggctac ctagaacaat ttggagactc acacggttca 840 ggagctaaat taggagatcc tagactacaa aaaaattttg atcctaggct tcacagactg 900 cccaatacag agtctcatca agtggttatg aaggattcac atgcatcaaa gggtgcccct 960 cacttaccca gatcaaaccc tggttcatca cagccctcag gggcaggaac tagcaattct 1020 ggttccgggg ctctgcctcc atatgcccct aaactctctt cctcagctgg ccttccactg 1080 ggaacttcca cttcagttct tagtggtatt agtttgtatg accctaggga tcacggttca 1140 tcatccacat cagagctagc aacagcttct tcaggagaaa actcaaagaa ccagaaaaaa 1200 agtggtggct taaaaagtag tgacaaaact gaaccttctc ctggagaagc catccttcca 1260 caaaaaccca gtccaaacgt gggagtcact cttgaggggc cagctgaccc acaggcggac 1320 gttcccagga gttctggtaa ggttcaggtc ccagcagtgc acagccttcc tgttcaggca 1380 1440 gggagcccga ccccagataa tgatcccggt agagaaacag atgacaaatc tctgaaagag 1500 gtttttaaaa cttttgatcc aactgcttca ccattttgtt agctattgtg taactgagca 1560 attettttca etettgtgae tateteagte etetgetgtt ttgtaactgg tttaceteta 1620

<210> 3253

```
tagtttattt atttttaaat tataaacact tttcagctgc tagtatcaga accacatgaa
                                                                     1680
gttatagcct ctaaagcctg cggtatttta tataatattt ttataacttt aagagactgt
                                                                     1740
agtaattgac ctaaaaactt atgttagctt cagtaaaagt acttttattg taaataaaca
                                                                     1800
atcatgaact caacactctg cctgaatata tgccagttgt ctttcataat caatgtttag
                                                                     1860
ataaatgatt gccacttttt atatggttgt ttagtttcaa gcaatatgat gtacattact
                                                                     1920
tttgagaaac agtattttga ctaggacctc tcttatttgt cagcacagaa ctgattaata
                                                                     1980
tgtaatgcta cctgctaatt aaaatgtaaa atcaagtaaa gaaaacattt taaaattaaa
                                                                     2040
aaaaaaa
                                                                     2047
```

```
<211> 1707
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (670)...(417)
<223> similar to gi1872200 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3253 cggacgcgtg gggaagaggt cccatttctg agccacagaa acaggccaca tccagtaggg 60 gtcctggaag gctgtgagaa cccagaggag accctgaccc agcctgcagg tagaagactg 120 cetttggagg cagetttgaa agatgaetet tecagatgga agaateagga agggeettee 180 cacgtggagg caccagcagg agcaaacgtc cctggtgtgt tcaggcaaag agccacagga 240 gagtgacctc gtggagtggg aagagattgt ttcccattcc cttgccaggg attggttgag 300 gaatggacaa ggcttgcagt tcacgcaagc cagtgaaatg cgaggggaag tcttgggagt 360 ggggtggagg aggtcatctg ggaagggtgt ccttggtctt aaaaagaggc acaagaggcc 420 gggcgcggtg gctcttgcct attatcctag cactttggga ggccaaggca gggggatcac 480 ttgaggtcag gagttcgaga ccagcctggc caacatggtg aaaccccgtc tctactaaaa 540 atacaaaaaa ttagccagac gtggtgccaa gcacctgtaa tcccagctac tcaggaggct 600 gaggcaggag aatcacttga acccaggagg cagaagttgc agtgagccaa gatcgcgcca 660 ctgcactcca gcctgtgtga caagggcgaa actccatctc aaaaaaaaag ggggagggtg 720 gcgcaaggag aggacacctc tctcctggcc ctgtcgccat cttccctcat caatagctaa 780 aaatggcaaa gaagaaagag ccaggacccc gtgccatcaa atcctccqqc cttqtqctqc 840 cctgtctcgg cactgcttgc cttaggagat caggagtgtt cctaqccact gggagatggg 900 atgcctgcca ctggcagctc tgccgtccat cctcaccatc ccaccgtccc cccaagacag 960 ctctccatcc catcctctgc ctcccttcta gcctcaacct aactcagggc tcccccgtct 1020 cacacctggg ttgcaggaac atcctcttca ccaacccccc tcccatccct cctcagggct 1080 gcctagggca gctacaaaaa ccaggccagc ctctgaaagg tgctccacat ctcattaaaa 1140 accgtgaaat cgcactgccc cactatcaga atagctcaga ggagaaggtc tgccagtacc 1200 aagtgctggt ggggatacgg agaagagcag ctcccaggcg ctgctggtgc aaatgtgctt 1260 tgttgcaccc acggcaggaa actgaccagc ttctcatcaa gttaaatacg catctaccct 1320 atggcctagc atttccactc ttgcttacac atccaggaga aatgagtcct tacatgcaca 1380 aaaggatgag taccgtaata ctcacatcag caaataaaca atacagctgt gtgtcagtag 1440 tagaatgaat aaattgtggt cgattcatac qttagaatac agcaatttaa aaacaactgc 1500 tacacacaaa aatgttggtg aatctttcag acacaatgtt gagcaaaaat agccacagaa 1560 gagtgtaagg ctgtacgatt ttatttaggt gaggttcaag aacagacaaa acacggtgat 1620 agtggtcaga agagcgggta cctctgagct gagggcattg accagcagtg ggcaaaaggg 1680 aacattctga tcccagaaat gttctat 1707

```
<210> 3254
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1370)...(9)
<223> similar to gill96429 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3254 ggaatttatt ggctaatgct accgtaaaag gtggtcggac acaattttga ttcctaaagg 60 teetgttaga aagaaaagag agaacatatt tatatttaee teeeteeet ttataettat 120 tatatttacc ctcccaaatt gtgattgaac tttgagccat agctaatttc cataatcctg 180 aatgtteetg teetatggea ggagatatea tttttggaat aggggtgata atgeeaceag 240 ggctccatat aataggaaca tcagcttccg tctgaatgta ccgtgtatgg ttctctttcc 300 aatgagtcca tcagcttatt ttataagaag gcccttcagt gcaatttttc ttaaaaatcc 360 ccttagggga ccagtcaatg acgattccat aggaattatt ttgtagcacc ccagccttac 420 ttgctacaca atttccccaa tgccaagcgt ccacaccttc aaaccaaact ctattttgtt 480 tacattcgag tttgtctggt cagaactgct gagtttcagg gctggaatgg ttatatttta 540 aactttgccc tgaaatcata tataaagtag cctgtgattt atttttcca gggattactg 600 ccaaccatac ttgtgtgcca atttgtaagc atccagcagc aggtcctagg catattggag 660 gatatttata tcctattgat atattcattt tcatcccttc ctcattagga tgcatcggca 720 ctctgttatc tatgggctca ggcatcgagg ttctgtcatt gttgtacacc tcaataatag 780 qqtccatcca actcacaqac ctaattaaag gaggaaatgg gacataagtc caataagtaa 840 aattttgagt tgcttttaca gtagggaggc ttaccgccac agtaagtacc accatcatag 900 ccaccattag gttactagtt gtttttgatt tgttctgtgc tctcagattg tcctctgcca 960 tctgtgccag tttcctgatt tgtccccatg ttggagggtc tgcctggtga gtattcttgg 1020 tetttteett tgtetetgag atttteatte atgecateae tegtataggg agttetgget 1080 cttcccagag tcctctctc ctggtgtggc tcatgataga ccttcagatg tttggtgggc 1140 acccacagag gcacctgatt gtcacttgga gagacagaag caaatcctct tccccatgta 1200 attatttttc ctttttccca actctttgta tgtgcatccc tccactgtat atcttgtctg 1260 gcatttttat tttccttttg tcctgttaag tgttgttcag ctgctgtcat gggctgatcc 1320 ttttgtaaaa ttaccccctt taatgttgat aaagcgaggt gtagttgtgc tggaaaaaaa 1380

```
<210> 3255
<211> 1145
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (685)...(885)
<223> similar to gi4191265 in the genepept database release 114,
```

```
<400> 3255
acattgcggt ggacttctct tccttcgatg ccatcactgt aggtaagaag gtcccactgg
                                                                       60
tgctttgctt ctttctccc ttccatatct cttagtgtct ccagagctgc agtacaagtt
                                                                      120
ggggggatgg actgtaaaag ccagaaatcc caagccacaa gcacgctgca ggtagcaacc
                                                                      180
ccacacccag caaaacaccg cttcttcctg cccactttcc cctctgcgcc aactgtacac
                                                                      240
accataccet atgettgtce atttgggaaa etggetteea ggacageate ttteetggaa
                                                                      300
agacagcagg aagctgatgg tcactcctca actctctctt gtctctgggc agacaggcaa
                                                                      360
cagcaactgt acatttttaa agggagccat ttctgggagg tggcagctga tggcaacgtc
                                                                      420
tcagageece gtecactgea ggaaagatgg gtegggetge eececaacat tgaggetgeg
                                                                      480
gcagtgtcat tgaatgatgg agatttctac ttcttcaaag ggggtcgatg ctggaggttc
                                                                      540
cggggcccca agccagtgtg gggtctccca cagctgtgcc gggcaggggg cctgcccgc
                                                                      600
cateetgaeg eegeeetett etteeeteet etgegeegee teateetett eaagggtgee
                                                                      660
cgctactacg tgctggcccg agggggactg caagtggagc cctactaccc ccgaagtctg
                                                                      720
caggactggg gaggcatccc tgaggaggtc agcggcgccc tgccgaggcc cgatqqctcc
                                                                      780
atcatcttct tccgagatga ccgctactgg cgcctcgacc aggccaaact gcaggcaacc
                                                                      840
acctegggee getgggeeac egagetgeee tggatggget getggeatge caactegggg
                                                                      900
agcgccctgt tctgaaggca cctcctcacc tcagaaactg gtggtgctct cagggcaaaa
                                                                      960
tcatgttccc caccccggg gcagaacccc tcttagaagc ctctgagtcc ctctgcagaa
                                                                     1020
gaccgggcag caaagcctcc atctggaagt ctgtctgcca aagttccttg aagaatgcag
                                                                     1080
cattgtcttt gtctgttccc accacatgga ggtgggggtg ggatcaatct taggaaaaag
                                                                     1140
caaag
                                                                     1145
     <210> 3256
    <211> 2096
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
     <222> (30)...(1048)
     <223> similar to gi487783 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3256
tagtccagcg tggtggaatt ccagaggtga aacctcacgt gtgtgaggag tgtgggcatg
                                                                       60
qatttatcca qaagtcqtcq ctcaaatcac atcqqaqaac acactcaggg gagaagcctt
                                                                      120
atgtgtgtgg ggaatgtggg cggggattta gccggaggat agtcctcaat ggacactgga
                                                                      180
ggacacacac gggagagaag ccttacacgt gctttgagtg tgggcgaaac tttagcctca
                                                                      240
agtccgctct tagtgtacat cagaggatac actctgggga gaagccttat gcatgcacgg
                                                                      300
agtgtgggca aggetttate aegaaateae ageteateag acaecagagg acaeacaeag
                                                                      360
gagaaaagcc ttatgtctgc ggagagtgtg ggcgaggctt tatagctcag tcaacctcc
                                                                      420
actaccaccg gagtacacac tccaaggaaa aaccttatgt gtgcagccag tgtgggcgag
                                                                      480
gcttttgtga taaatcaact ctcctcgcac acgagcagac acattcaggg gagaagcctt
                                                                      540
atqtqtqtgq qgaatgtggg cggggatttg gccggaagat actcctcaac agacactgga
                                                                      600
ggacacacac aggagagaaa ccttacgcat gcatcgagtg tgggcgaaac tttagccaca
                                                                      660
```

```
agtccactct cagcttacat cagaggatac actcggggga gaagccttat gcatgcgtgg
                                                                      720
agtgtgggca aagctttagg agaaagtcac agctcatcat acaccagaag atacactcgg
                                                                      780
ggaaaagctt tagaggtgca aggagtgagg atgtgatttt agcaacaagt caqccatcag
                                                                      840
ccacaccage ggaaatgett agggagaage ettgtttgta aggtaatgtg gacagagetg
                                                                      900
tacgtggaca tcattacttg tcacgtgtca gaggacacac tcgggagaaa ccttcatgga
                                                                      960
gtgagagtaa ggtgttggct ggaagtgqcc ccttaagaga tacttggagt caaatctatc
                                                                     1020
cactgtacgc ccaccccact cttgttctaa gagctttggg gacagtcttt tgacccctta
                                                                     1080
catteettta gatgtgaaga tgacagagat etaaettetg agagcagagg tgtcaagtga
                                                                     1140
cggtcccctt ggaggaatgg tctttgcatc tgactacttc cttctgcaac tgtgttcttc
                                                                     1200
cattagcttc catgacactc tcctgcttta tttttttcta catctctagc ctttgctgtt
                                                                     1260
tectetecta ecceacetti agattitaet cagagiteag tetecagece tacaatetga
                                                                     1320
gggacacctt taccaggtcc ccttcctaac cctccagtcc caaatccaag attctttaac
                                                                     1380
cacactctaa aagttcttca gactcaggac ttaaacatag ccacgccacc ttggccttca
                                                                     1440
atgacaggga totagcaatg otgoatcato agoottocaa taccaggttt aagggtattt
                                                                     1500
taaacacagc tcctcttaaa tcctccaatc tcagtaccca gtgttttagc catgctcggg
                                                                     1560
tggctaaatt acatccagga atggtgccag ggcctttagc catttgtctc tcctcacact
                                                                     1620
ccagggccca tatggcccag gttctgacag tttgccttac tcccttggcc tggggctagc
                                                                     1680
cctacctgat accctgtgtc aatgagtgta ccttqqaqaq ctatccactc aggccccagt
                                                                     1740
gcctctattt gctaagggac tctgccacag aaaagaaggg gagagatgtt catgtaacct
                                                                     1800
caaaatactt aggcttggtt ttgatgctag agaggaaaaa ggacttggag agagagaagg
                                                                     1860
aatggctggt ccagaggctt ttgtccactc cctctcactg gaagtggttg atctccaggg
                                                                     1920
aatccccaag gttagcctgc ttaggggaag ggctaggggt acctggaatg taggatctcc
                                                                     1980
cccatgcctg gcctaccacc ctaatgtgtc cggaattggt gggttcttgg tcttgctgac
                                                                     2040
ttcaagaatg aagccgtgga ccctcacggt gagtgttaca attcttaaaa aaaaaa
                                                                     2096
    <210> 3257
     <211> 1142
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (6) ... (1142)
    <223> similar to gi5441615 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3257
attcacatct tattcagcat caaagaattc acacatgaga gtaagcacat gaatgtaatg
                                                                       60
aatgtggaaa agctttcagt caaacctcat gccttattca gcatcacaaa atqcatagga
                                                                      120
```

```
aagagaaatc gtatgaatgt aatgagtatg agggcagttt cagtcatagc tcagatctta
                                                                      180
tcctgcaaca agaagtcctc accagacaga aagcctttga ttgtgatgta tgggaaaaga
                                                                      240
actccagtca gagagcacat ctagttcaac atcagagcat tcataccaaa gagaactcat
                                                                      300
gaatgtaatg aagatgggaa gatatttatc aaattcaggc ttcattcagc atctgagagt
                                                                      360
tcacaccagg gagaaatcat gtatgtactg catgtggtaa agccttcagt catagctcag
                                                                      420
ccattgctca gcatcagata attcacacca gagagaaacc ctctgaatgt gacgaatgaa
                                                                      480
gaaaaggtat tagtgttaaa ctcttaatcg actcctgcaa atctatacca qtgagaaatc
                                                                      540
ttacaaatgt attgaatgtg gcaaattttt catgctatta gtattttcat accttagtca
                                                                      600
catttggaga attcacatgg gaataaaatt ccattgctgc aatgaatgtg aaaaagccat
                                                                      660
cagtcaaaga aactaccttg tttagtatca aattcacgcc atgcaaaaag attataaatg
                                                                      720
taataagcat gtatgtgtgt gaggagattc agtcataacc caacqctcat tcaacatcaa
                                                                      780
```

```
agaatttata cctaagagaa cttatttggg tgtagtaaat ggcagatctt tcaataggag 840 tttaactagt ctttgtcata tcagaatatc catagtagac aagaatttga tgtaacgcaa 900 atggaaaaac tcgacaccac atttcaggct ttacccaaca tcgaaataat ggagagaaaa 960 ttgttgatta tttgtttatg aaattgttaa tacatagtcc caatcttttt cattgcacaa 1020 aaatctaggg ttgacttggt aaatgcagtg acattttctc atggagttcc tttatttaat 1080 atgtattcta agtaggtacg tttatttta ctttttatt ataattttga tattaaaaag 1140 aa
```

```
<210> 3258
<211> 1199
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(545)
<223> similar to gill84790 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3258 ttcagtgtgg cggaattccc atcgtggagt tccacatgac gactgaggcc caagccacca 60 tccgcatgga caccagtgca agtggcccca cccgcctggt cctcagtgac tgtgccacca 120 gccatgggag cctgcgcatc caactgctgc ataagctctc cttcctggtg aacgccttag 180 ctaagcaggt catgaacctc ctagtgccat ccctgcccaa tctagtgaaa aaccagctgt 240 gtcccgtgat cgaggcttcc ttcaatggca tgtatgcaga cctcctgcag ctggtgaagg 300 tgcccatttc cctcagcatt gaccgtctgg agtttgacct tctgtatcct gccatcaagg 360 gtgacaccat tcagctctac ctgggggcca agttgttgga ctcacaggga aaggtgacca 420 agtggttcaa taactctgca gcttccctga caatgcccac cctggacaac atcccgttca 480 gcctcatcgt gagtcaggac gtggtgaaag ctgcagtggc tgctgtgctc tctccagaag 540 aattcatggt cctgttggac tctgtgcttc ctgagagtgc ccatcggctg aagtcaagca 600 tcgggctgat caatgaaaag gctgcagata agctgggatc tacccagatc gtgaagatcc 660 taactcagga cactcccgag ttttttata gaccaaggcc atgccaaggt ggcccaactg 720 atcgtgctgg aagtgtttcc ctccagtgaa gccctccgcc ctttgttcac cctgggcatc 780 gaagccagct cggaagctca gttttacacc aaaggtgacc aacttatact caacttgaat 840 aacatcagct ctgatcggat ccagctgatg aactctggga ttggctggtt ccaacctgat 900 gttctgaaaa acatcatcac tgagatcatc cactccatcc tgctgccgaa ccagaatggc 960 aaattaagat ctggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag 1020 tecteactga ecaaggatge eettgtgett acteeageet eettgtggaa acceaectet 1080 cctgtctccc agtgaagact tggatggcag ccatcaggga aggctgggtc ccagctggga 1140 gtatgggtgt gagctctata gaccatccct ctctgcaatc aataaacact tgcctgaaa 1199

<213> Homo sapiens

<210> 3259 <211> 3596 <212> DNA

```
<220>
<221> misc_feature
<222> (3381)...(2440)
<223> similar to gi535518 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3259 gttccagctt gtagaggcta ctagatttcc tcaacttgtg ggtgcatgat ccaatctctg 60 cctctgtgat caccttgcct cctcctcttc tcctcttctg tatgggtctc ctcctctgga 120 ggaagagtgt caggcctctg agcccaagct aagccatcgt atcccctgtg acctgcacgt 180 acacatccag atggccagtt cctgccttaa ctgatgacat tatcttgtga aatgccttct 240 cctggctcat cctggctcag aagctcccct actgagcacc ttgtgacccc cactcctgcc 300 tgccagagaa ccccctttt tcctttacct acccaactcc tataaaacgg ccccaccct 360 atgtcccttc gctgactctc ttttcggact cagcccgcct gcacccaggt gaaataaaca 420 getttattge teacacaaag cetgtttggt ggtetettea caeggaegea egtgaaattt 480 ggtgccgcgc atgaaatttg gtgccgtgac tcggatcggg ggacctccct tgggagatca 540 atcccctgtc ctcctgctct ttgctccgtg agaaacatcc acctacgacc tcaggtcctc 600 agaccgacca gcccaagaaa catctcacca atttcaaatc cggagcttgc tacatgtgcc 660 ggaaatctgg ccactgggcc aaggaatgcc cgcagcccgg gattcctcct aagccgcgtc 720 ccatctgtgt gggaccccac tgaaaatcgg actgttcaac tcacctggca gccactccca 780 gageceetgg aactetggee caaggetete tgaetgaete etteceagat ettetegget 840 tagcggctga agactgacac tgcccgatcg cctcggaagc cccctagacc atcacggacg 900 ccgagcttcg ggtaactctc acagtggaag gtaagcccgt ccccttctta atcaatacag 960 aggctactca ctccacatta ccttctttc aagggcctct ttcccttgcc tccataactg 1020 ttgtgggtat tgacggtcag gcttctaaac ctcttaaaac tccccaactc tggtgccaac 1080 ttagacaata ctcttttaag cactcctttt tagttatccc cacctgccca gttcccttat 1140 taggctgaga cactttaact aaattatctg cttccctgac tattcctgga ctacagctat 1200 ateteattge egecettett eccaateeaa ageeteettt gegteeteet ettgtattee 1260 cccaccttaa cccacaagta taagatacct ctactccctc cttggtgacc gatcatgcac 1320 ccettaccat ctcattaaaa cctaatcace ettaceccae tcaacgecaa tateccatee 1380 cacagcatgc tttaaaaaga ttaaagcctg ttatcactcg cctgctacag catggccttt 1440 taaagcctat aaactctcct taaaattccc ccattttacc tqtcctaaaa ccaqacaagc 1500 cttacaagtt agttcaggat ctgcgcctta tcaaccaaat tgttttgcct atacacccca 1560 tggtgccaaa cccatatact ctcctatcct caatacctcc ctccacaacc cattattctg 1620 ttctggatct caaacatgct ttctttacta ttcctttcca cccttcatcc cagcctctct 1680 togotttoac tiggactgac cotgacacco atcaagetca gcaaattace tiggetigtac 1740 tgctgcaaag cttcacagac agccccatt acttcagtca agcccaaatt tcatcctcat 1800 ctgttaccta tctcggcata attctcataa aaacacacgt gctctccctg ccaatcgtgt 1860 ctgactgate teteaaacee cageacette tacaaaacaa caacteettt cetteetagg 1920 catggttagc gtggtcagaa ttcttacaca agagccagga ccacaccctg tagcctttct 1980 gtccaaacaa cttgacctta ctgttttagc ctagccctca tgtctgcatg cagcggctgc 2040 cactgcttta atacttttag aggccctcaa aatcacaaac tatgctcaac tcactctcta 2100 cagtteteat aaetteeaaa atetattte tteeteatae etgaegeata taetttetge 2160 ttoccagoto ottoagotgt actoactott tgttgagtot cocacaatta cogttgttoo 2220 tggcccagac ttcaatccgg cctcccacat tattcctgat accacacctg acccccatga 2280 ctgtatetet etgatecace tgacatteae eccattteee catattteet tettteetgt 2340 tecteaceet gateaegett gatttattga tggeggttee accaggeeta ategeeacae 2400 accagcaaag gcaggctatg ctatagtaca agccactagc ccgcctctta gaacctctca 2460 tttcctttcc atcgtggaaa tctatcctca aggaaataac ttctcagtgt tccatctgct 2520 2580 gatttgcccc cacccaggga ctggcaaatt agctttacct caacaatgcc ctgaggtcag 2640 gaaactaaaa tacctcttag tctaaataga cactttcact ggataggtag aggcctttcc 2700 tgcagggtct gagaaggcca ccgcagtcat ttcttccatt ctgtcagaca taattcctca 2760 gtttagcctt cccacctcaa tacagtctga taacagacga gcctttatta gtcaaatcag 2820

```
ccaagcagtt tttcaggctc ttagtattct gtgaaacctt tatatccctt aaggtcctcc
                                                                     2880
atcttcaaga aaagtagaat ggactaaagg tcttttaaaa acacacctca ccaagctcag
                                                                     2940
ccaccaactt aaaaaggact ggacaatact tttaccactt tcccttctca gaattcaggc
                                                                     3000
ctgtcctcag aatgctacag ggtacagccc atttaagctc ctgtatagat qctccttttt
                                                                     3060
attaggcccc agtctcattc cagacaccag agaacaaacc ccctttgact gtaattttcc
                                                                     3120
attaccttcc ctaatcctat aaaacggccc caccccatct ccctttgctg actctctttt
                                                                     3180
cggactcagc ccgcctgcac ccaggtgaaa taaacagcct tgttgctaca caaagcctgt
                                                                     3240
ttggtggtct cttcacatgg acgcgcatga aatgtggcgc atgaaatttg gtgccgtgac
                                                                     3300
tctgatcggg ggacctccct tgggagatca atcccccgtc ctcctgctct ttgctccgtg
                                                                     3360
agaaagatcc acctatgacc tcaggtcctc agactgacca gcccaagaaa catctcacca
                                                                     3420
atttcaaatc cggaccccac tggaaatcgg actgttcaac tcacctggca qccactccca
                                                                     3480
gagcccctgg aactcttgcc caaggctctc tgactgactc cttcttggct taacggctga
                                                                     3540
agactgacgc tgcccgattg cctcggaagc cccgtagacc atcacagatg ccgagc
                                                                     3596
```

```
<210> 3260
<211> 2331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2164)...(864)
<223> similar to gi4884550 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3260
ttttttttt ttctaggtcc aatggtagtt tttattcccc aggaacaaag ataatgtgga
                                                                       60
gaagaaactc caaaaggaaa cagagcacgg atgacagaaa tqacaccacq qcaqcctqqc
                                                                      120
tcaggagtca ggtagataga tggctgctcc acagtggacc tggtcatggc cctggtttct
                                                                      180
tggatccaca tttgccccgt ctcttaagtg tccatctcag aggtggagga tggagacagt
                                                                      240
gaggtggaaa acgtgcttgc tctacacaaa gacaaatgga tcttctattc ccagaggacc
                                                                      300
agggacacca aaacctccct cttcagaatg gaggtagaca gataaaaatg agagggctt
                                                                      360
gagtgtcaca gacaatctga aagtaataat aggggctcac tgtggctggc agaactggta
                                                                      420
ctgaaatggg gactacaggg gaagcagctt ccagttttat ggtggagagt cagtcctgaa
                                                                      480
tcaggccctg gggcaattat aaccagagtg ctgtttctag ccacttactt caaaggacta
                                                                      540
tggctatgtt gaatcagaag ccattatctt tttcccagag gatgcacttc catccctatt
                                                                      600
tctggcatga tcctgctccc tacgagcctg atcctttaaa aaacagattg gcaagcgacg
                                                                      660
agaaaaacgg tgcctcacat gcttgagatg tgacagcttc tcctgcaggc aagaacctct
                                                                      720
cagaacaagg teetttggta tgagetagat catecaggee tgteettgea gaacacacea
                                                                      780
agactcatcc ctgtactaca gggtggcctc tggctatggc ctggcacagt gaggacagag
                                                                      840
gcggggtcct gagtcaacat cacagggagg tctcctqqag gatqcaqqtq qaqctqctcc
                                                                      900
cctgataggc tgtgccatcc agggccatgg cctccttgtc tctgctgtcc cccagcacac
                                                                     960
catteetegg etteteagga aacaggeeag tgtegaggtg gteetggeeg tageteetge
                                                                     1020
agtggagccg cttctgacag gacaacggaa ggagggacag gagctttggc aacactgggt
                                                                     1080
aaatggttgc agggttcagg gaccggcctc gcattctcca tgaatggaaa tgtgcttgtg
                                                                     1140
agtetatggg tggatecate cacageageg ggeeecatgt cetecettgg eececagaga
                                                                     1200
ccccagcccc cacccacctc ctacatccca gcagaaaagc atgacagcta cggacaccca
                                                                     1260
aggageteag agggeaggag cetttetece taggagteee ettagggeee tettgttaaa
                                                                     1320
cccctccggt gcttcatctg caccgcaatc cccacacct taccaagtga agtagactga
                                                                     1380
caaatcaggc cccaccacaa atcactgtgg tggagttgtg agcactgtac cataagtaag
                                                                     1440
```

```
acaaggaata gaaccgctgc agccctgtgg gcctgggaag agcagaggtg agaacaatta
                                                                     1500
gcaattcgtt ggcagggcga ttccttgggc accaatctct acttgcccgc atggtcccag
                                                                     1560
ggtcttggga cccaataccc aacatttccc tggggcctct ggtggcccat cccttagcaa
                                                                     1620
gacccctgtg aaagccctca aaggaggact ttgagaaaac aagaagatag caagcctgc
                                                                     1680
cttacttgga gaaggtagtc aagggcatca gtgtggtcac agtggcaacg gttagattgg
                                                                     1740
tgggcaggga gaagctggac ccattagagg gagagggtgg catgctgaag cccatgctgg
                                                                     1800
tcacgatgct cccgatgcca atccagaagg ccatgacgag cccagccaac aggcccacaa
                                                                    1860
cagcaccetg cegagacaca gtgcaggect gtcacaagge cagtectgee ageectcaeg
                                                                    1920
gcagtcctca gctctcctgg tgacagccct gccaaccccc aggtccatcc tgctacacat
                                                                     1980
gactgtggat ccagatgcat cactcacagg agggttagca catggaaaga acattccaag
                                                                    2040
gcagaagagt cccagcagcg gtcccccaac catgccaaag atgctgattg ctgcctgcag
                                                                    2100
cacaggtccc atctgggagg aaatataggc cattcctaga caaagcagcc catagccaaa
                                                                    2160
ggctggggga aaaggacagg agaggaaaca agaaggtgtg agttaacaca agcaatgggg
                                                                    2220
taaagcaagg ctccctgccc agccaaacta ccacctctgt ctctctggaa acaaaaggca
                                                                    2280
tattacatca cgccccagct tcctcccacc aagtcctcac tcctatgtga c
                                                                    2331
```

```
<210> 3261
     <211> 1980
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (41)...(1414)
     <223> similar to gi2811216 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3261
aggggactct cttctccccg cttgtctctg gcccctgcag aggcttggaa ggccaaaaag
                                                                       60
aagcaggagc tgcagcatgc caacagttcc ccactgctcc ggggcagcca ctccttggag
                                                                      120
ctccgggcct gtgagttagg aaatagaggt tccaaqaacc tttcccaaaq cccaqqagct
                                                                      180
gtgccccaag ctctggttgc ctggcgggcc ctgggaccga aactcctcag ctcctcaaat
                                                                      240
gagetggtta etegteatet eccteeagea eccetettte eteatgaaac teecceaact
                                                                      300
cagagtcaac agacccagcc tccggtggca ccacaggctc cctcctccat cctgctgcca
                                                                      360
gcagccccca tccccatcct tagcccctgc agtcccccta gcccccaggc ctcttccctc
                                                                      420
tetggcccca gcccagcttc cagtcgcctg tecagctcct cactgtcatc cetgggggag
                                                                      480
gatcaagaca gcgtgctgac ccctgaggag gtagccctgt gcttggaact cagtgagggt
                                                                      540
gaggagactc ccaggaacag cgtctctccc atgccaaggg ctccttcacc ccccaccacc
                                                                      600
tatgggtaca tcagcgtccc aacagcctca gagttcacgg acatgggcag gactggagga
                                                                      660
ggggtggggc ccaagggggg agtcttgctg tgcccacctc ggccctgcct caccccacc
                                                                      720
cccagcgagg gctccttagc caatggttgg ggctcagcct ctgaggacaa tqccqccaqc
                                                                      780
gccagagcca gccttgtcag ctcctccgat ggctccttcc tcgctgatgc tcactttgcc
                                                                      840
cgggccctgg cagtggctgt ggatagcttt ggtttcggtc tagagcccag ggaggcagac
                                                                      900
tgcgtcttca tagatgcctc atcacctccc tccccacggg atgagatctt cctgacccc
                                                                      960
```

1020

1080

1140

1200

1260

1320

aacctctccc tgcccctgtg ggagtggagg ccagactggt tggaagacat ggaggtcagc

cacacccage ggctgggaag ggggatgcct ccctggcccc ctgactctca gatctcttcc

cagagaagtc agctccactg tcgtatgccc aaggctggtg cttctcctgt agattactcc

tgaaccgtgt ccctgagact tcccagacgg gaatcagaac cacttctcct gtccacccac

aagacctggg ctgtggtgtg tgggtcttgg cctgtgtttc tctgcagctg gggtccacct

tcccaagcct ccagagagtt ctccctccac gattgtgaaa acaaatgaaa acaaaattag

```
agcaaagctg acctggagcc ctcagggagc aaaacatcat ctccacctga ctcctagcca
                                                                     1380
ctgctttctc ctctgtgcca tccactccca ccaccaggtt gttttggcct gaggagcagc
                                                                     1440
cctgcctgct gctcttcccc caccatttgg atcacaggaa gtggaggagc cagaggtgcc
                                                                     1500
tttgtggagg acagcagtgg ctgctgggag agggctgtgg aggaaggagc ttctcggagc
                                                                     1560
cccctctcag ccttacctgg gcccctcctc tagagaagag ctcaactctc tcccaacctc
                                                                     1620
accatggaaa gaaaataatt atgaatgcca ctgaggcact gaggccctac ctcatgccaa
                                                                     1680
acaaagggtt caaggctggg tctagcgagg atgctgaagg aagggaggta tgagaccgta
                                                                     1740
ggtcaaaagc accatcctcg tactgttgtc actatgagct taagaaattt gataccataa
                                                                     1800
aatggtaaag acttgagttc tgtgagatca ttccccggag caccattttt aggggagcac
                                                                     1860
ctggagagat ggcaagaatt tcctgagtta ggcagggatc aggcattcat tgacactcag
                                                                    1920
ggagtgtcac acatttctgt tctgcaatta aagggagaat gaggttcatc caccaaattt
                                                                    1980
```

```
<210> 3262

<211> 1824

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1827)...(319)

<223> similar to gi854124 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3262
ttttttttt ttaaaaggta ataggtgttt attaaaaact ttttcaccca gaggcagtta
                                                                       60
acatttataa cttaaaaccc agcccactac aaaaagggat gggagcaata aaaactgtgc
                                                                      120
aacattgacc aaaggaccca aacagacgag gcccgggaag ggcagcccca ggggactggg
                                                                      180
gteteteete teeegaggee eagageaget geattgtgga ageegggatg eeeceageee
                                                                      240
ctggcggggc cctgtgcacc gggcctctcc ggctggggca gggacccccg aaaggccatc
                                                                      300
agtagtagtg tgtgctcatc gcgcagcctg gacgctcagc cactcactct gctccgccat
                                                                      360
tgctgaggct gcaccccacg gcggctcgat gtgaacgcca gttgccgctc ccgcggtctc
                                                                      420
cctccagtgt gctctggatt tccttcagga ctctctcatc actgagcaga gcgcgctcca
                                                                      480
tcaccaggcc gggctgcttc tcctcgccat cactctgagt ccctgagttc ctggctcggc
                                                                      540
tcggggcctt cttggggccc gcaccgttac cagggcggtg gttcttggtt tctgctgaat
                                                                      600
ccaccagaca ccggggctcc accagccact tggtggagag agagaagcgc tcaaactccg
                                                                      660
agggtgagat caggtagaag ccttggccat atttggtgaa gacgcaggag gcgatgccac
                                                                      720
tgacgtcctc ccggcggatg cagctgtagc gcacctgggg cttgagcagg ggcagcgaga
                                                                      780
ccacctggat gtcgcccagg ttggtaagga ctgccaggtg gtgctccccg tagtcctcgg
                                                                      840
ctcgacgact gccgaagtgg gccacgctga cccgccgcac tcttgagccc tccagggccg
                                                                      900
tcagcttcaa cttcagcttg gcactcacct tgggcagcgt gaacaccttg aactgctcct
                                                                      960
ctgatacgac gagcagctgg tggcttccct gcatgtcagg gctcttcgac agatcatggg
                                                                     1020
ccacttcgag gggctcggga aggggtacgc tgtgtccgtc gagcaccagg atgcccacca
                                                                     1080
coggogocog gtgcatcago tggatotoct tggcctgctc tgcccgcaca ggctcatcca
                                                                     1140
ttctccgctc ggcgggaggc acacgcaggg agaaggcata gatggtgccc ccattggtgc
                                                                     1200
cageceacag egaggggeag tgeegggage tgteetteag gtaggtgtea geaaagtaca
                                                                     1260
gggtccggac gaagcctgtg aaggagtcct ctgccgagcg agcctcgatc ttgcgctgca
                                                                     1320
caggegeeag etecatgite tggaggeetg geegeteage etiggeacte eecteetgig
                                                                     1380
cctcaggcct cacctctcct ggggggccag ctgggtgccg cttccggctg gacacccggc
                                                                     1440
teegaegeat eeggeggaat gaetgaegea aggaettett gagggaettg aegegggaga
                                                                     1500
gtgggccctc caaggccagc tggtctctgg ggtgcagtgt gcacttaaca aagacctgcc
                                                                     1560
```

```
gccgctgctg gtggtcaaag aggccaaagc catggctggt gccgaaggcc acgagccgcc 1620
actcagagtg cagggccaag gaggtgacca cagccggggg ctgacactgc accaacacga 1680
agggctgaaa gccaggctca aagcgcacgg gccctgagcg ggctgccagg cgctcgtgcc 1740
ccttccagcg gtagccctct tggtcaaaaa gcaggtaagc ctccacctgc tccacagcca 1800
gctccgctgc ctcgtcattc agtt 1824
```

```
<210> 3263

<211> 1299

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (302)...(1272)

<223> similar to gi5917666 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 3263 ctgtggtgga attcgtacct ctgagtgtcc tctaggatct cagctggtgc ctaacaatga 60 cctctttaga ctcagctcat tttcactgct acatcttcaa gccattctcc tgcctcttgg 120 caacctctag tggcccagct tctgcctcac agcagcctct ccatgcatgc ctagctcctg 180 cctctttagg gaacttacag gcctaaaact ttcttaattt gggcttctca ggcccagctc 240 ctgccttctg ttggcctcta caggcctggc atcatccttt caacagcctc tttaggcccg 300 gcctctccag gaccaaaaca tccttaagtc aacctcacca ggcccggctc ctgtctcctt 360 geggeeteea gaggeegage ttttgeetge caatggeete tetageecea gettttgeet 420 gccaatggcc tctctagccc cagcttctgc ctttcatcgg tctctccagg cttagctcct 480 ttctcttcac ggcctctgca ggcctaaaac ttcctcaatt tggcatctcc aggcccagct 540 cctgcctcca ggccgcctct gcaggcctat ctcaagcctt acaacagcct ctttaccccc 600 agctcctttc tccgacttgt ctctccaggc ctagaacttc ctcatgttta cctcaccagg 660 cccacctcct gccttccagt agcgtctaca agtttggctc ctgcctccca tggatctctc 720 caggccccaa actttctcaa gtcaacctca ccaggcccgg cttctccctt tcatcagcct 780 tccaaaggcc agcttttgct tcatgtctgc cttccgagtc ccagctcctg ttttatggca 840 gcctcctgag gcccagctcc tgcctcctag tggcctcttt tggcccaact ctttcctcac 900 cagggccttc cagaccacgt tcctgccttt tagcagccac tacaggccca gctttgcgtc 960 ctttcaagag tcctgcctca cagtggcctc ccaagggcaa ctttctgcct catgtcagcc 1020 tettgtgece tggteetget teetggtaga etetgeagge eetgeteetg cettaegttg 1080 ccccttttat aaagatccag ttcctgcctc ctggctgcct ctatgagccc aaatcctgcc 1140 taacaacaac ctgtttttgc ccagctcctg cttcctggca gcctccttag gccaaaaatt 1200 tectteagtt gaceteteca ggeceatect ectgeetete ageaecetet ttaggeceag 1260 ctcctgcctt aataaatttg aataaattat tgttatgtg 1299

```
<210> 3264
```

<211> 2188

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (74)...(2141)
<223> similar to gil015321 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3264 gtacagtgcg gtggaattcg ctgaccatga gccgctgggg gttcatgtct qqqctctqaa 60 eceetttagg etggttette gteggateet gegtegaget gtgegtttet teatggagat 120 cttaaaggca ccacctggct tcctaggcag cctggtacct gtagtggtgg agacactggg 180 agatgettat ecagaactge aaaggaacte ageecagate geeaacetgg tgteagagga 240 cgaggcagcc ttcctggcct ccctggagcg gggtaggcgg atcattgatc ggactctgag 300 gaccctgggg ccttcagata tgttccctgc tgaagtggcc tggtccttgt cactgtgtgg 360 agacctggga ctccccttgg acatggtaga gctgatgctg gaggagaaag gggtccagct 420 agactccgct ggactggagc ggttggccca agaqqaqqcc caqcaccqqq cacqqcaqqc 480 tgagccagtt cagaagcagg gattgtggct tgatgtccat gcgcttgggg agctgcagcg 540 ccaaggagtg ccccaactg acgacagccc caagtacaac tactccctgc gacccagcgg 600 aagttatgag ttcggcacct gtgaggccca ggtgttgcaa ctgtatacaq aqqacqqqac 660 agcagtggcc tccgtgggga aaggccagcg ctgtggcctc ctcttggaca ggaccaactt 720 ctacgcagaa caggggggcc aggcttcaga ccgtggctac ctggtgcggg cagggcaaga 780 ggacgtgctg ttcccagtag cccgggccca ggtctgtgga ggtttcatcc tgcatgaggc 840 agtagcccct gagtgcctgc ggttagggga ccaggtgcag ctgcatgtgg atgaggcctg 900 gcgtctaggc tgcatggcga agcatacggc cacccacctg ctgaactggg cactgaggca 960 gaccctgggc cctggcacag agcagcaggg ctcccatctc aatcctgagc agctgcgctt 1020 ggatgtgacc acccagaccc cattgacccc agagcagctc cgggcagtgg agaacactgt 1080 gcaggaggcc gtggggcagg atgaggctgt gtacatggag gaggtgcccc tggcgctcac 1140 tgcccaggtc cctggcctgc gctctctgga tgaggtttac ccagaccctg tgcgggtggt 1200 atcagtgggg gtgcccgtgg cccatgcatt ggacccagcc tcccaagccg cactgcagac 1260 ctctgtggag ctatgctgtg ggacgtgagt cactcctttg tgctgcctgg cccaggggac 1320 ccggatcctt gcccttccct tggtctttgg agccatcagc ccttaatggg agatgcacqc 1380 tggcttctcc cttctctact gtcatgcccc gactttctgt tcactccttc ctcccacagg 1440 caccigitac glacigggc tgtaggggac ciggttatca tcggggaccg ccagcittcc 1500 aagggcacta cccgcctgct ggccgtcact ggggagcagg cccagcaggc ccgagagcta 1560 ggccagagcc tggcccagga agtgaaagcg gccactgagc ggctgagtct ggggagccgg 1620 gatgtggcgg aggcactgag gctgtccaag gacataggac gactcattga agctgtggaa 1680 actgctgtga tgccccagtg gcagcggcgg gagctgctgg ccacagtgaa gatgctgcag 1740 cggcgtgcca acactgccat ccgtaagctg caaatgggac aggctgcaaa aaaaactcag 1800 gagetgetgg ageggeacte gaaggggeet etgattgtgg acaeagtete tgetgagtet 1860 ctctcagtgc tggtgaaggt ggtacggcag ctgtgtgagc aggcccccag cacqtctqtq 1920 ctcctactca gcccccagcc catggggaag gtgctgtgtg cctgtcaggt ggcccagggt 1980 gccatgccca ccttcacagc agaggcctgg gcactggcag tgtgcagcca catggggggc 2040 aaggcgtggg gctcgcgagt ggtggcccaa ggcaccggaa gcactactga cctggaagct 2100 geceteagta tageceaaae etatgeeete agecagetet gaeceaggte egeceaggga 2160 cccacatgga ctaaatgtaa ttaaaagg 2188

```
<210> 3265
```

<211> 975

<212> DNA

<213> Homo sapiens

```
<220>
     <221> misc feature
     <222> (934)...(356)
     <223> similar to gi1872200 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3265
gtggtggaat tcaccgcacc taaaatgcac ttgcactatt actcagcagc agtaacatgg
                                                                       60
taacacttaa aatggtactc ggggacctcc aaagactaaa ctgacaagcc ttcaaggagc
                                                                      120
ccaqqqqcta qaqtataatq qtqcqatctq qqctcaccqc aacctccacc acctqqqttc
                                                                      180
aagcaattet geeteggeeg etegagtage tgggattaca ggeatgtace accaeceeg
                                                                      240
gctaattttg tatttttatt agagacgggg tttctccatg ctggtcaggc tggcctcagg
                                                                      300
tgacccacct gcctcggcct cccaaagtgc tgggattaca ggcgtgagcc acacctggcc
                                                                      360
taaaaatcat ttaatttttt atgcttgcct agttataagg tcaaagagaa tcaaatgact
                                                                      420
gatgcagtca gcacctaaca acctctgtat atgggaaggg ggtaatgaga acatactatt
                                                                      480
tggaaataat aacagcctaa gagccaagtg ctgaagttac atttctgcct accaggcta
                                                                      540
aagctctcct cactgtctcc tacccagtcc tectttccat caattaccag tetettgtat
                                                                      600
aaatgtatcc attaccaggc tcacagactg ggagtgattt ttctcctttg gagctcgtcc
                                                                      660
agaatccatc agcctcacac acatatttac ctgcaaatca ttggaaaagc aaaaatgttt
                                                                      720
aactgcatgt ataagatggt tgtcatttgc ttgaataccc ccttgaaaaa tgttgattct
                                                                      780
tgagcatcag tgggacatag aggtgtctga agaaccattt tacatgattt cataaatagg
                                                                      840
aggtctctgc attaccatgt ttgcttgcaa agtggaaacc ttttagatgt gtaacttgaa
                                                                      900
tgtatcaaga tctcaagtgc ttaatgataa ggtgttgact tgttaaatta aaccatttgg
                                                                      960
aatacaaaaa aaaaa
                                                                      975
     <210> 3266
     <211> 1334
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (25)...(878)
     <223> similar to gi219867 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3266
ggacgggcat tcctccacac ggagttcctg gtcagcctgg tggccgctga cttcctcctg
                                                                       60
atcagcaacc tgcccctccg cgtggactac tacctcctcc atgagacctg gcqctttggg
                                                                      120
getgetgeet geaaagteaa cetetteatg etgteeacea accgeaeggg cagegttqte
                                                                      180
ttcctcacag ccatcgcact caaccgctac ctgaaggtgg tgcagcccca ccacqtqctq
                                                                      240
agccgtgctt ccgtgggggc agctgcccgg gtggccgggg gactctggqt qqqcatcctq
                                                                      300
ctcctcaacg ggcacctgct cctgagcacc ttctccggcc cctcctqcct caqctacaqq
                                                                      360
gtgggcacga agccctcggc ctcgctccgc tggcaccagg cactgtacct gctggagttc
                                                                      420
ttcctgccac tggcgctcat cctctttgct attgtgagca ttgggctcac catccggaac
                                                                      480
cgtggtctgg gcgggcaggc aggcccgcag agggccatgc gtgtgctqqc catqqtqqtq
                                                                      540
gccgtctaca ccatctgctt cttgcccagc atcatctttg gcatggcttc catggtggct
                                                                      600
```

```
ttctggctgt ccgcctgccg atccctggac ctctgcacac agctcttcca tggctccctg
                                                                      660
gccttcacct acctcaacag tgtcctggac cccgtgctct actgcttctc tagccccaac
                                                                      720
ttcctccacc agagccgggc cttgctgggc ctcacgcggg gccggcaggg cccagtgagc
                                                                      780
gacgagaget cetaccaace etceaggeag tggcgctace gggaggeete taggaaggeg
                                                                      840
gaggccatag ggaagctgaa agtgcagggc gaggtctctc tggaaaagga aggctcctcc
                                                                      900
cagggctgag ggccagctgc agggctgcag cgctgtgggg gtaagggctg ccgcgctctg
                                                                      960
gcctggaggg acaaggccag cacacggtgc ctcaaccaac tggacaaggg atggcggcag
                                                                     1020
accaggggcc aggccaaagc actggcagga ctcaggtggg tggcagggag agaaacccac
                                                                     1080
ctaggcctct cagtgtgtcc aggatggcat tcccagaatg caggggagag caggatgccg
                                                                     1140
ggtggaggag acaggcaagg tgccgttggc acaccagctc agacaggggc ctgcgcagct
                                                                     1200
qcaggggaca gacgccaatc actgtcacag cagagtcacc ttagaaattg gacagctgca
                                                                     1260
tgttctgtgc tctccagttt gtcccttcca atattaataa acttcccttt taaatatatt
                                                                     1320
tatttgcaag acca
                                                                     1334
```

```
<210> 3267
<211> 3262
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3236)...(2843)
<223> similar to gi3219569 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3267 ttttatgctt tttgttcttg attttatttt acataattgc atgtataaac tttctgatgg 60 attgattttt cetttetgte eegattatet ageetetgat gtgeteaaga getggatetg 120 ctgacttatc aaaaaagtga catttggcca ggcacggtgg ctcagcctca cctaatggtt 180 tettageaaa etteagtaga atgtttagaa egeggeeetg ataaaettga gtgetggtag 240 gaggtgctac ctcgctcaat ctgtgagcaa ccagccctgt gccctggatg cttggcgggt 300 ggagagaaag acagtgttat gtgggcaagc ctccaactca ccaqttqcaq taqaqcatct 360 ggctctctgt ctgctgctat agccctgtga gtcagccaga cgtgtggtcc ccaagccagc 420 ttcccaccta gcacccttgt tctgctacag ctcccccacc tgccctcttg cattgcctag 480 gateceaege eeegetttea gtetgetetg ggacatetgt ettettettt geaggggaet 540 aagtatatga cttaatgaat cctaaaagga aaaaaagatg tcaggaaaaa aaagtgcaca 600 caagaaatgt tgcaacatct catccttagc aactttgttt ggttagtact gcataactca 660 cagcagattc caaggcacct gccttgaaca ttgctacatg ctctaggcat tatcaggaac 720 gcagccaggg tgcctgcaaa gttgtctcca gtttctgggt aagaggacca tcatccatat 780 tgtctgtggc tttgtgtctg agttgggcta ctgagcctgt gacttcagac cccttgtctg 840 cctgatggat acattctgta taatacgtta ccatcacaat ttcatgaatg taactaatga 900 agatctagcc cttccgtgcc gcctgctgaa ctatgtcacc tgtggataat aaaacctcta 960 cacataggca ttttatacaa aggcaagtca aacagcaatg gtagtggcaa gtgatgtatt 1020 tggcttaaag aagcttgtgt tactgaagtt aacgcagaag tctggcctcc gtttgtggga 1080 ttattaaata tatatcctac gggatcagag tcatctatta gaaacagtga tagccctggg 1140 tataaataaa catttettta gagtttggeg teagttttte aatgteeate eteaaateag 1200 acagtetgtt tgaggggtea gtttteaggg tgeatetgea eegagagget tgaggeagea 1260 atgacccctg ggctgcagtt cggttgcagg cgctggtggc gggcagtcca ggttggaggg 1320 tggagatggg ccaaggtcac agatgctgca gggcttcctg tccttgctct gtgtaaccgt 1380 catcgcggtg ggtgtttgcc cactgtccaa aggactcctg gatgtgcacg tttctctgtg 1440

```
tgttggccag gcgcttctta tctcgggaga agaagctaaa cagtcgcttg atgcccgact
                                                                     1500
ccggctgggg ggacgtcctc gggtgggcga tgggtggggg ttggggtatt cggttttcct
                                                                     1560
cttccatttc ttcactctta tagtaagcca gctcctcctg cagcaagaac accttggact
                                                                     1620
tgagctcgtt cctctcgtgc agcacgtccc gcagctcctg cagggtgaac cgggggggt
                                                                     1680
tggggtcctt gagatccatg gccaccttct ctgcgtcgga gatgctctcc tctcccaccg
                                                                     1740
geteegtete aggeteetee teeceattet ggetgtgete eecetgeage etetetegea
                                                                     1800
acttccccag ctctgctcgc aggctgccca tctcctgctc cttggtctgc aggtctgcct
                                                                     1860
ccagctccac cttctgttcg atcagggctt tcccctgggc ctccaccacc qtqacccgqt
                                                                     1920
gccgaaggtc atggttgatc ttcatcagcc gtgtctgctg ctgctgtaaa gcctcaacgt
                                                                     1980
cctcattttt caggcccagc tccctgtcct tggcgcggat ctcgtcgcgt tgtttgtcca
                                                                     2040
ccacctectt cagettette atcacetgte getecegete tgacatgeet gtcateceag
                                                                     2100
ctacttagaa gactgaggtg ggagaatctt ttgagcctgg gaggttgagg ctatggtgaa
                                                                     2160
ctataattgc gccactgcac tccagcgttg aagacagaga cctcaaagaa ctgaaaacat
                                                                     2220
aggtccacac aaaagcttga gcacgatgtt cacagcagca cgattcacaa cagccaaaag
                                                                     2280
gtggtgacgt ctcacaggtc catccataga tgagtgggca aacgacatgc agtatggctt
                                                                     2340
catgcttctg gaactcctcc tctgagaagt tgacatcctt gtgggagagg ttggtcatga
                                                                     2400
gctgcttgtt ctcctcctgc agctgggcga tctgggagag gaggtcctgc gcctccctc
                                                                     2460
gccacacate etecaceage tecageteet caggeteete etececatte tggetgtget
                                                                     2520
ccccctgcag cctctctcgc aacttcccca gctctgctcg caggctgccc atctcctgct
                                                                     2580
cettggtetg caggtetgee tecageteea cettetgtte gateaggget tteceetagg
                                                                     2640
cctccaccac cgtgacccgg tgccgaaggt catggttgat cttcatcagc cgtgtctgct
                                                                     2700
gctgctgtaa agcctcaacg tcctcatttt tcaggcccag ctccctgtcc ttggcgcgga
                                                                     2760
tetegtegeg tigitigies accaectest teagetiett cateacetgt egeteceget
                                                                     2820
ctgacatgcc ttcatgcttc tggaactcct cctctgagaa gttgacatcc ttgtgggaga
                                                                     2880
ggttggtcat gagctgcttg ttctcctcct gcagctgggc gatctgggag aggaggtcct
                                                                     2940
gcgcctcccc tcgccacaca tcctccacca gctccagctc cttctggtgc ttgcgctcct
                                                                     3000
tetegatgeg gtecateete teeaggegea ggeggteeag eteeaggege agetegteea
                                                                     3060
gctcgggcgc gacgtggtgg cggctgacca gcacctccag gatctccagg acgcgcacga
                                                                     3120
ccttgggcat gaggcgcgcg atggcctcgc agccgtgctg gtcaatgacc cgctcgaact
                                                                     3180
egtggeecae aagegaegeg atgtegtaea egteeatgae ggteageteg geeaegttet
                                                                     3240
tgtccagcgc cggaattcca cc
                                                                     3262
```

```
<210> 3268
<211> 1610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1568)...(248)
<223> similar to gi217730 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3268
ttttatcacc atttctctga cccctcctg tcttaggtct gaataattgg gtcacccata 60
ggaatgcaga acccagggtg ggcagagcag agcagcactt gctggcgata ggcctcgagc 120
ctgtgtttct gagtccttga ggaccacgag ctaacaggag ctggtctgta ggttgctctc 180
cgtaagcagt gatgcaatgg acgagggatc gtagacactg tcgaattcct catctgagct 240
cagcccttcg tttttgagag ctgactcagc agctgagcgg gaagctttgc gccaggagtc 300
cttctccaga gacttgatcc gggcctggag ctgttcattg acctcatgct gctcctccac 360
```

```
ctcacgctgg gccttcttcc tcaggccgtc cagtcgctca atttcctctt ctgcttcatc
                                                                      420
cacctgacgc ttcaaagcct tcaccctcag gcttagctgg tctttctggt cattgacatg
                                                                      480
ctgccgctcg tcttcaatct ggatggatag ttctttaact ttccgctcca gttttcgatt
                                                                      540
ggtagactgc agaactgtct tctccctctc ttcagcctgt agccqctcct qcaacaactg
                                                                      600
attctgggac tcaagctgag agaggctggc actaggcttc tggaagcctt ctgagctggc
                                                                      660
caaccgggtc ttcaggtcct tgttctgtct ctccaaggag attttgtcac actccaggtc
                                                                      720
ctgccgagca gacctttcct gcatgagctc tgtcctcagc tgatccacct ggtcccggcc
                                                                      780
acgattcacc cgatctgtta gcagctccac ggtgttcttc tcctcatcta actctgtttc
                                                                      840
cagccgtgag actttttcct cgagaccctt cagctgccgg gccctgtcgt cctgggaacg
                                                                      900
cttcttgttc tctgcctctt gctccagccc ctgcagtcgc tgggccagta gctctttgtc
                                                                      960
cagccgggct gtgtcccgct cagcctggga tgcctgcagg gcctgccgca gcctctggat
                                                                     1020
ctcatcctga agtcggctca gtcctccaga ggtcttctca gcctcactgg cccaatcctt
                                                                     1080
ggcctggcgc tgggcatctg ccacctcccg ccgggccttt tccttataat cctccagctg
                                                                     1140
ggcctggagc tgctgcaggg cttgcttaga gtcctccccg atcttctcca actccttgtt
                                                                     1200
cagtcggtcc acagtcctgt ccagcaaacg cttctgctcc tccagctcag ccttgcctcg
                                                                     1260
ccggagcacc tcccgctgct tcccttcctc ctccagggcc cggttcagtg tctgctgctc
                                                                     1320
ctgccccagg cgggccagcc cccgctgagc ctcctctagg cgtgcctcca gtgcccgctt
                                                                     1380
ggctgctgcc agactcccct cctcttcctg ggacgcattc agggcctcct ccagctgctg
                                                                     1440
tttctctgcc tccagccgct gcagcttgtc ccgtagtcgt gcctccaccg cttccccacc
                                                                     1500
atccaccaga cctcgagtct ccttcagctg ctgctccaaa cccaggatgc gccggcggaa
                                                                     1560
ttcgtcattt tcctcctggg tctcccgaag cgtcgtctcc actgcggccc
                                                                     1610
    <210> 3269
    <211> 2841
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1598)
    <223> similar to gi306712 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3269
                                                                       60
                                                                      120
                                                                      180
```

caacgtccca tttgacctac caagcccatt ggacaacggg tctcaaaggg gcacccagcc ccacccgcca cggatttcac ccagttccat tgctgcccac gagaccattt cgcggctggt gggcttctca gcgggtcaag tgccagtacc tggatctcat caaaaaggga ccccagcaag ctgttcaatg aggagcggtt gatcgacaag accaaggtga catatctgaa gtggctgcct 240 gagteggaga geetgtteet ggeateaeae geeagtggee acetgtaeet gtacaaegte 300 agccacccct gcgcctcggc cccgccccag tacagcctgc tgaagcaggt catggggctt 360 ctctttctat gctgccaaga gcaaggcacc ccgcaacccg ctggccaagt gggcggtggg 420 tgaggggccc ctcaacgagt tcgccttctc gcccgatggc cggcacctgg cctgtgtgag 480 ccaggatggc tgcctgcgcg tcttccactt cgactccatg ctcctgcgtg ggctcatgaa 540 gagctacttt gggggcctgc tgtgtgtgtg ctggagccct gacggccgct acgtggtgac 600 gggtggcgaa gatgacctgg tcaccgtgtg gtccttcacc gagggccgcg tggtggctcg 660 aggecatgge cacaagteet gggteaaege tgtggeettt gaccectaca ccacaaggge 720 agaggaggcg gcgacagcag ccggtgctga tggggagcgg agcggcgaag aggaggagga 780 ggagecegag getgegggea eaggetegge egggggegee eegetetete caetgeeeaa 840 ggctggctcc attacttacc gctttggctc ggcgggccag gacacgcagt tctgcctgtg 900 ggacctcact gaagacgtge tetaceegea eeegeeeetg geeegeacee geaceeteee 960

```
tggcacacet ggcaccacge caccggeege cagcageteg aggggtggeg ageetggeee
                                                                     1020
aggccccctg cctcgctcgc tgtcccgctc caacagtctc ccgcacccag ctggcggggg
                                                                     1080
caaggeggge ggeeegggtg tggeggeaga geetggeaca ceatteagea ttggeegett
                                                                     1140
egecaegete acaetgeagg ageggeggga eeggggggea gagaaggage acaagegeta
                                                                     1200
ccacagcctg ggcaacatca gccggggtgg cagtggcggc agtggcagtg gtggggagaa
                                                                     1260
gcccagcggc cctgttcccc gcagccgcct ggaccccgcc aaggtgctgg gcactgcgct
                                                                     1320
gtgcccgcgc atccacgagg tgcccctgct ggagcccctt gtgtgcaaga agatcgccca
                                                                     1380
ggagcggctc acagtcctcc tgttcctgga ggactgcatc atcactgcct qccaqqaqqq
                                                                    1440
ceteatetge acetgggece ggeegggeaa ggegtteaca gaegaggaga cegaggecea
                                                                     1500
gacaggggaa ggaagttggc ccaggtcacc cagcaagtca gtggtagagg gcatctcctc
                                                                     1560
ccaaccagge aacteeeega gtggeaeagt ggtgtgaage catggatate gggeeeeeee
                                                                     1620
aaccccatgc ccccagcctc ctagccataa ccctccctgc tgacctcaca gatcaacgta
                                                                     1680
ttaacaagac taaccatgat ggatggactg ctccagtccc cccacctgca caaaatttgg
                                                                     1740
gggcccccca gactggcccg gacacgggcg atgtaatagc ccttgtggcc tcaqccttgt
                                                                    1800
cccccacca ctgccaagta caatgacctc ttcctctgaa acatcagtgt taccctcatc
                                                                     1860
cctgtcccca gcatgtgact ggtcactcct ggggagacac tccccgcccc tgccacaaga
                                                                     1920
gccccaggtc tgcagtgtgc ccctcagttg agtgggcagg gccgggggtg gtccagccct
                                                                     1980
cgcccggccc ccaccccagc tgcccttgct attgtctqtq cttttqaaqa qtqttaaatt
                                                                    2040
atggaagece eteaggitee teeetgieee geaggaeete tiattiatae taaagiteee
                                                                    2100
tgttttctca gcgggtctgt ccccttcgga ggagatgatg tagaggacct gtgtgtgtac
                                                                    2160
tctqtggttc taggcagtcc gctttcccca gaggaggagt gcaggcctgc tcccagccca
                                                                    2220
gcgcctccca ccccttttca tagcaggaaa agccggagcc cagggaggga acggacctgc
                                                                    2280
gagtcacaca actggtgacc cacaccagcg gctggagcag gaccctcttg gggagaagag
                                                                    2340
catcctgccc gcagccaggg cccctcatca aagtcctcgg tgttttttaa attatcagaa
                                                                    2400
ctgcccagga ccacgtttcc caggccctgc ccagctggga ctcctcqqtc cttqcctcct
                                                                    2460
agtttctcag gcctggccct ctcaaggccc aggcacccca ggccggttgg aggccccgac
                                                                    2520
ttccactctg gagaaccgtc caccctggaa aggagagctc agattcctct tggctctcgg
                                                                    2580
agccgcaggg agtgtgtctt cccgcgccac cctccacccc ccgaaatgtt tctgtttcta
                                                                    2640
atcccagcct gggcaggaat gtggctcccc ggccaggggc caaggagcta ttttggggtc
                                                                    2700
tegtttgece agggaggget tggetecace actttectee eccaqeettt qqqeaqeaqq
                                                                    2760
tcacccctgt tcaggctctg agggtgcccc ctcctggtcc tgtcctcacc accccttccc
                                                                    2820
cacctcctgg gaaaaaaaaa a
                                                                    2841
```

```
<210> 3270
<211> 2443
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (323)...(1840)
<223> similar to gi3327222 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3270
gtgttgggca attccgctcg agctgaagcc gacagtgtct gtgacttccc tctctgttgc 60
acttaccaac cctctttcca tgtctggaat gagaaaagaa aaagagcagc attgccagag 120
cccaggtttg tcatctcca ggcatctcag aaccagtatc ctcttggaga gcattcaagg 180
aaaaagtcca gaaagtgcgc tgtcagacca cgtcactaag agtttcatca agctcttaga 240
gatcgctcct gcagggccca ctgctgtgct tttctgaaac atccatttat taacagagcc 300
```

```
ccactatttt aacatgttcc aggccctagc acaaaacaca gatcttaaag aacgcttacg
                                                                      360
cagaatccat gccgagtctc tgctcctcga ctcccccgct gtcgccaagt cgggtgacaa
                                                                      420
tctggcagag gaaaactcca gagatggaaa accgagctct agttcatcag ctttctaatg
                                                                      480
aaagtaggac tetteeatea ettgaeteee tttetggagt ttttttttga tgetteaggg
                                                                      540
aagttctgtt atctccaagc tcttcagaaa acgagatttc tgatgatgac tcatatgtca
                                                                      600
gtgacataag tgataatctt tccttagata atctcagtaa tgatttagat aatgagagac
                                                                      660
agaccttggg gcctgtcctt gatagtggtc gggaagcgaa gtcccggaga agaacgtgcc
                                                                     720
tgccggcgcc ctgcccgagc agcagtaaca tcagcctgtg gaacatcctg aggaacaaca
                                                                     780
tegggaagga cetgtecaag gtggccatge eggtggaget gaacgagece etgaacaege
                                                                     840
tgcagagget ctgcgaggag ctggagtaca gcgagctcct ggacaaggcc gcgcagattc
                                                                     900
ccagcccct ggaaaggatg gtatatgtgg cagcctttgc catatcagcg tatqcatcta
                                                                     960
gctactaccg agctggaagc aagccattta atccggttct tggagaaaca tatgaatgta
                                                                     1020
ttcgggagga caagggcttc cagttttttt cagaacaggt cagccaccat ccgcctatct
                                                                     1080
ctgcgtgtca tgctgagtct agaaattttg ttttctggca agatgtgaga tggaaaaaca
                                                                     1140
aattctgggg caaatccatg gaaattgttc caattggcac aacccatgtg actctgccag
                                                                     1200
tttttgggga tcattttgag tggaacaaag tgacctcttg catccataac atcttaagcg
                                                                     1260
ggcagaggtg gattgagcac tatggagaga ttgtcatcaa gaacctgcat gatgattcct
                                                                     1320
gctactgcaa agtgaatttt ataaaggcaa aatactggag cactaatgcc catgagattg
                                                                     1380
aaggcacagt gtttgacagg agtggaaaag cggttcatcg gctgtttggg aaatggcatg
                                                                     1440
aaagcatcta ctgtggcggc ggctcctctt ctgcctgtgt atggagagca aatcctatgc
                                                                    1500
cgaaaggcta cgagcaatac tatagcttca cacagtttgc gctqgaatta aatqaaatqq
                                                                    1560
atccatcate aaagtettta ttgecaceta etgacaeteg atttaggeea gaccagaggt
                                                                    1620
ttctagagga agggaactta gaagaagctg aaatacaaaa gcagaggatt gaacaactgc
                                                                    1680
agagagaaag geggegggte ttataagaaa ateatgtgga geaceageet eggtttttea
                                                                    1740
ggaaatccga cgatgactct tgggtgagca acggcaccta tttggaactt agaaaagatc
                                                                    1800
ttggtttttc caaactggac catcctgtct tatggtgaaa aagtaaagaa gaaagataac
                                                                    1860
attagtgtat ttctcctgtg cttgccttct gaagtggcac aaacctgtgt ttatatattt
                                                                    1920
aaaagatact ctaggatgat cacttgtgct tatcttagca ttgtaactct ttaagtctat
                                                                    1980
attttcctca gtgcgtttct ttacaatttc aaatgttacc ctgattgttt atatgaatgt
                                                                    2040
agaacacctt gacatttttt tttatatata aactatttaa taaaaatgaa agattgaatg
                                                                    2100
ttcatgtgtg ggttaaaaaa agaagcttta acactaattt tccaaaggtt agggaagatt
                                                                    2160
ccaattaaat ttatgcctta taaaattatg ttgtagaaaa aaaatcaacc tctcccaqqt
                                                                    2220
gcattaagaa ataagaattc ccagggttac tcacccatgc gtaagctacc caagtttaat
                                                                    2280
ttggtagctg aaatatcttt ttgcctcaga cagctcttga attgctcata cagaacaatt
                                                                    2340
ctgctggtgc tggagtctga agaatatttt catttgcatt ttagtggtta gggagaggat
                                                                    2400
ataagattaa tggaatgtat atttttatat aagacgtata cgg
                                                                    2443
```

```
<210> 3271
<211> 3639
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(717)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3271
tttttttttt ttgagacaga gtcttgctat gttgcccagg caggtcttga gctcctgggc 60
```

ttaggggatc ctcccgcctc agcctcccaa gtagttggga ctacaggcac acactactac 120 tcttggtttg cctattttta aatcaggttg tttgttttct tattattgtg ttctctacac 180 tgtaggatat tctacctttc ctagaatttc atgtaaatgg actcagacat actgttgtgt 240 ctggcctctt ttgttcagtg taatgttttt gagcttcatc cttqcatqtt atgtqtatca 300 gtgattgatt caatttttat tgctgcatag tattggattg tatagctata ccacaatttg 360 tttattcatt ctcctgttga tggaatattg gttgtttcca gtatttagct attattattt 420 tattttttt ttttgagacg gagtctcgct ctgtcgccca ggctggagtg cagtggcggg 480 atctcggctc actgcaagct ccgcctcccg ggttcacgcc attctcctgc ctcagcctcc 540 caagtagctg ggactacagg cgcccgccac tacgcccggc taattttttg tatttttagt 600 agagacgggg tttcaccgtt ttagccggga tggtctcgat ctcctgacct cgtgatccgc 660 ccgcctcggc ctcccaaagt gctgggatta caggcgtgag ccaccgcgcc cggccaaaaa 720 gaagaaatat taagttgtcc ataatctgtt atatctaact attataaagt ataaataaaa 780 caaaataagt tttacattac ttgtttctgt cacattgttc aaaattcttt tgggcttaaa 840 gccaactatg aattttagta gagtaggagg acaatgggaa acagattctt tttttqttqt 900 tattgaaatg taagcaactt gcccttaaaa tagtatgaat atccagttca ggtaacaact 960 ttcactttta attagtcaaa tatatattaa atataaaaat ctaatgctgt acagatgtga 1020 ctttggacat tttaagtatt agtttattca gaaacgcctt taaaaatcag tgtgtataga 1080 actageteat ttettaactg teaaatttag aagtgeaaca gtgggtette agagagaata 1140 tgcccaagaa aaactggata aaaagactgg gtaaatacat caaatgaaac agtgattcac 1200 ttttgacaag actgaaatat aagtatataa tcactgatgc atatttattc agtaggccca 1260 tgtgattatg tggtttttaa ctaacagcat ttatttttgc aaactgcttg gcattcctcc 1320 aagggaaagg agcttctaga ctacaaacac tgagcacata catcttaaat taacacatga 1380 attgcatatg gattgttgat atgcttttag agtcttgtct ctacagaaga aaaacacgtt 1440 cctggggtcc atgccttttt cagaggcaca atctatagct tggaacttaa ttqctqtcca 1500 tggtatctgg cctttaatta taagaaattg ttgacacccc aatacagggt gcatctaaat 1560 acataatgca agaaaggagg ttttagtggt taaacttcgg cacgcttaaa gattttagga 1620 atgtaattat gccattaggc agtatttctt tgtctatgga cttaaaaagt tttcttgggg 1680 cattttaaag aggtttatca aagttatatt gttgaaaaac tattttccct ggaaataatg 1740 tcccctcctt cccaccttct gccttgatat tcttactgga aaaaaagtga aattgttcag 1800 aattacaacc atatagggtt tccaggcata gcatgggcac attgggaatg gaagactaga 1860 agaccccagc aaggaatgta ggtacattaa ttgctgccta ccctgagaaa taactctgag 1920 tttcttctcc caagtattcc tcaaggatcc attcattgta gagtcaacag atgtctttta 1980 gaattcatta taataagaag tccatgaaca tacacacat atccttgaat agttttacat 2040 tatatttttt ctaggtagtt cctgaatact ttaatgagct taataaatga gaaaatgtat 2100 tgaaaggtct ttgtaagtta ctatataaat atgacatgtg ttttaataat atctgaattt 2160 ggctgggaac aatggctcat gcctgcaatc ccagcactta gggaggccaa ggcgggagga 2220 tcccttgagc tcaggagttt gagaccagcc tgagcaaaat ctctaaaaaa aaaatttcta 2280 ttagccaggt gtggtggcat gcgcctgtac tgtagtctca gctactcggg aggctgaggc 2340 aggagaattg cttgaaccca ggaggcagca gttgcagtga gctgagatta cgccactaca 2400 ctccagcctg gtgacagagc gagactatct ccagaaaaaa aagaaaaaaa gaaaggaaat 2460 attgagtact teetetatgt aaaceeetgt attgggtget gaaagagatg gaattataag 2520 gaacttaaca tttagtaaat gggccaggcg cggtggctca cgcctgtaat cccagcactt 2580 tgggaggccg aggcgggcgg atcacgaggt caggagatcg agaccatcct ggctaacaca 2640 gtgaaacccc gtctctacta aaaatacaaa aaattagccg ggcgtggtgg cgggcgcctg 2700 tagtcccagc tactcgggag gctgaggcag gagaatggcg tgaacccggg aggcggagct 2760 tgcagtgagc cgagatcgcg ccactgcact ccagcctggg cgacagagcg agactccgtc 2820 tcaaaaaaaa aaaaaagaaa ccccgtctct actaaaaaat acaaaaatta gccgggcgta 2880 gtggtgggcg cctgtggtcc cagctacttg ggaggctgag gcaggagaat ggcgtggacc 2940 caggaggcgg agcttgcagt gagccgagat tgcaccattg cactccagcc tgggcaacag 3000 agcaagactc cgtctcaaaa aaaaaaaaa ttatcaatac caaatatgat acagttatgt 3060 aatacccatt ttgcatatgc acagtggaaa tactgtaaaa actacaagat gaaagaaaac 3120 cgactggcca gaactttaaa tttcagacta atccatgata aaaatctaga tgataaaaaa 3180 caaaaataaa attaacaaaa tagataactc gatatccttt ccatattcag tcgtctacta 3240 acatgccatc tccaaacaaa tccattacct caaaagagga agaaaatggg ccaggcgcgg 3300 tggctcatgc ctgtaatccc agcactttgg gaggccaagg cgggcagatc acgaggtcag 3360 gagategaga ecateetgge taacaeggtg aaaceeegte tetactaaaa atacaaaaaa 3420 attagctggg catggtggcg ggcgcctgta gtcccagcta ctcaggaggc tgagacagga 3480

```
gaatggcgtg aacccaggag gtggagcttg caatgagcgg agatcgcgcc actgcactcc 3540 agcctgggcg acagagcaag actctgtctc aaaaaaaaa acaaaccaaa ccacccaaaa 3600 ggacaccaaa aaacactcct catgccccaa gtcataccc 3639
```

```
<210> 3272
<211> 1829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1712)...(957)
<223> similar to gi6003574 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3272 ttttttttt ttactgtaaa ttttagaaat gtttatttta gaaacacaca aagctaaaat 60 gcatatttca gtccaacaac ctagagagaa gaaataggga gctacatgtt tttgtttagt 120 cttgtttttt cctcaaaatc catccctaag agtcaggagc tacaagttta taggtacgca 180 tttgtatgaa tatgcttgcc atggattcta aggacctagg aacatctagg aatacaggac 240 attacatttt tattttgaaa aaatatttaa attaaattta catgtacaat ataatatcac 300 tttcaggaac aaaaaacat taatggaaag taggaatata cttaaaacaa aattatttt 360 acttttgagg tcaaattcta caccctggaa aaagtcagaa gcccatacta gagttttgta 420 gaagtttttt taaaaatgct tttaaaattt agcaaggctg caaagtctgt caataaataa 480 atcaaattac tatctgtcag taagctatga agtccacagt aagtaccaat gcaaactgaa 540 cagatttaga aagtcaatcc atactttcta gcatcatcat gaaaactcca tgactgaccg 600 acacatcatt tccaatgtta tcatcaaggc ctcagtgtgt accccaggac acactttcaa 660 attctcaggc agttccttaa gaatgtgtgg gagtttctgc aatgtcttta tatttccagc 720 ataaagatcc agtaaccagt cagtatgaac actggtggtt tctttatgac ttttacaagc 780 cataagcagt tcatttagat gagttaaccc tttggaagct aaaatgaact ctgaagataa 840 atcaaaaatt gaacaaaaat ttagcaacat cctactaagt aaaaaggagc caaattcaag 900 ttgctggtaa tgaaaatgtt tctctgcttg tgcatgaaag ttctccactg tatcttctat 960 ttttgtaata gcaaacagtt cttctttgat ttgaggtgaa accacataat ccaagggcaa 1020 ttctccctta gcattcctct gttgtaaaag cactgggccc ccatgctgta gtagcagctt 1080 gccaatttct acatgtccgt ttgacagtgc atcatgcaaa ggagtcaccc cgtccacttg 1140 agtgagcaga tctacctctg gacaacgttg caaaatttcc tggacacaca ctqtqttqcc 1200 atagttacag gcttcatgca aaggcgtcca gccagcattg tctttaacat tgatgtctat 1260 teetggeaaa gagagaagaa gaateaattt eteeaettgg ttatttatge aagetetatg 1320 cagggctgtt tctcctttta gattagtctt gtgaaaattc atcttttaa ctacagaggg 1380 gcaattetee ttggaacatg acaattetee ttetgaette tttttcaatt tttttaatga 1440 tgaggaacat ttagcaaggt tcaggtctag taactctggc agcccttcga cttgtttttg 1500 tttagtacca ttcagcatta gtaaggttct ctgagagtca aaacaaggcc gctgtcctat 1560 tttctttgac acctgaatct ttccagaccc aagcacacca gttttcccca aggctggtaa 1620 ataggaatat accattttct gaagagagag tggctcagaa gaaacactgc cagagctctg 1680 tagacacaac tttttaaaga ctgcctctgc aacaaacatt tgaagccagg aggaggaaaa 1740 ggagcaaatg aaaatctcta attcctgtga agaaaagtca tcacacgaaa gagaaacata 1800 acttcctaag tcatcagaca tgtgtcgcc 1829

```
<210> 3273
     <211> 672
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (4)...(646)
     <223> similar to gi488555 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3273
tacctcatca ggcatcagag gattcatact ggttagaagc tctatggctg caaccagtgt
                                                                       60
cagaaacttt tcaggaatat cgctggcctc attaggcacc agaggactca tactggtgag
                                                                      120
aagccctatg agtgtaatca gtgtggcaaa gccttcaggg acagctcctg tctgaccaag
                                                                      180
caccagagta attcacacta aggagacccc atatcagtgt ccagaatgtg ggaagtcctt
                                                                      240
caagcagaac tctcacctgg cagtacatca gagactccat agcagggagg gtcccagccg
                                                                      300
gtgtcctcag tgtggaaaaa tgttccaaaa gagctcatcc cttgttcgac atcaaagagc
                                                                      360
acacctggga gagcaaccca tggaaacata atggttgggg gccacatgag tcttccagtt
                                                                      420
cactctcact cctgtgttta ggaggcgtgt cttagatctg actcctctct ggtcagtaga
                                                                      480
aaagaatcct ttaagctatc cagtgaattg atgaatgtga gacattgctg agccacactg
                                                                      540
ttaagtctgc tcattgggga actccagaga caacttaggc atgagggcag aaaagtcttt
                                                                      600
ggggatgatt cagtctgtac cagacatgac aacacacac ctggaatgaa atgtgcaaac
                                                                      660
atgggggtga ct
                                                                      672
     <210> 3274
     <211> 1605
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
    <222> (1597)...(227)
     <223> similar to gi1575333 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3274
tttttttttt ttcgtatttc aagggttttt attctgagca gtaggtacaa aaaataatga
                                                                       60
catagttgtg tctaattctg tatagttcag gcaccctcca caggctgtca atctctgatt
                                                                      120
tgatctactt ttaccagatt taacagatcc ttgaatttac tttactgtat atacttcctt
                                                                      180
cttgctcaca ttgggaatca aactaatgct ggaaacatgc atcttcagac ttcattgagg
                                                                      240
aattccagat tgagacacgc tgggatgtgg attgagtcca tggttagaga agatggatta
                                                                      300
aatggaaaca aaacaggaaa catgtgcttg gcatctaata gcagttgctg agggtcattc
                                                                      360
cgctcttgta gttgtgcctg gattgttcgt ataaaggcca ctgttacccg ttcttcaaat
                                                                      420
tcattcaggg gagtataaag gtttaaaatt ttgacaatct gctgggtgct gagggaggta
                                                                      480
```

```
cacagggage agatageete tgegteetee tgggttttet tetttaattg caggagetgg
                                                                      540
gctgcttgga tcagaggttc catggtctga actgctccac tctggtgaag gtttcttccc
                                                                      600
cgaagccact cctcaagctg acttatattg tacctgagtt gcatgcctgt gctccaagag
                                                                      660
cagacgtcct tccgcaggag caggtcatta agagtcactg cgttgatcat gtagaagagc
                                                                      720
tgtttgaata cctgcaggat gatctcaggg tccaagccct ggtcacacat gactgtatga
                                                                      780
aaggcattca tetggeggat gatagettee aggeggtatg agttateete atetgeeatg
                                                                      840
ctggaggagt gcttctggga gccagtgggc ttcacaccag atagaccctg aatgctctaa
                                                                      900
ttttccaaca tggcagaaac tatcatcggc tgtaacacac cctcggcaat tttaatgagc
                                                                      960
tgctggtaga tctgaatgga aaggtcacqt caqqcacctq acqqtattcq qtqaqqtcaa
                                                                     1020
aattottaag acagtgttca attotgottt gcagtgttat gagtcatgaa gccctcatco
                                                                     1080
ccgctgtact gcttcagaca gtgaagaagg cggcaggtgt tggataacca gaatgacgtc
                                                                     1140
atctcaaagt catcattgtg ctttttcagg actttcttaa tgccgttgat ggtggaggtc
                                                                     1200
agcagggagt gcaccttgag atcgtcgttg gtgtagtccc gcgtgccgga tgcacatgta
                                                                     1260
gaggatgtag gcggggagac agggcactgt gcccgacagc atctggggct tcaagtctgt
                                                                     1320
caccaggttc cggatgagga gggcctcgtc ctctttgtgg tactccagca tgccctggaa
                                                                     1380
atcettetet tteegetgga cegtgacetg cetgttgage teatggeget teeteteact
                                                                     1440
ctgggccaat gcctgggcag cttctaggtc ctgggctttc ttcatgtaaa tcttcagttg
                                                                     1500
ctttttgagc ttcctctcat tcttttccag cttttctacc agttctttaa ggtccagatt
                                                                     1560
ctcgttggtc agccgggata tttcctgctg aacqccqctc gtqcc
                                                                     1605
```

```
<210> 3275
<211> 764
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (675)...(226)
<223> similar to gi4164002 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3275
cccccttttt tttttttc aaaagtgttc tgtttaatac gctttgtctg gtagtgcttg
                                                                       60
ggtgcctgtg gttggtttct ctcactggaa ccagtcctgg gccccactcg cctggcttcc
                                                                      120
tecagtegee ecaggteetg gggetggtgt gteagaaget geetttgtee tetecattea
                                                                      180
tccatccttg ggcctgtctg gcctatgatg ccctcattca gctctcaggg tccagaggtg
                                                                      240
actggtgtgg atcctgctcg ctgtgccaag atggccctcc agatgcggca taccatccct
                                                                      300
cccctgtggg taatggactc agtgtggctc agccagaagg tggccctgga ctctatcttg
                                                                      360
cacacactgt ctgcccagtg ccccctctgt ccctagggga cccaggtgcc cctttggttt
                                                                      420
ccaggaagga acctaggcag gcctgcagtt ggccaggatg aggccatatg catggttcac
                                                                      480
acttgggggg cccaggatgt acctgatgcg ggtgtagatg aggtcatctc gagtggcata
                                                                      540
ggtgagcaga gtgtggaggg tgaagctatg gttcaacagc tggatgtggt caaagacccg
                                                                      600
cagaaagagg gaaataagaa attacagaaa gatgtgtcga gacccaggta ctagctctgc
                                                                      660
tetgttgeea aaataatgag geagateaea eeettetggg eeteagtttt eteateeata
                                                                      720
caatgggacg agaatactaa gtgttcttct ggtagtgaga ttct
                                                                      764
```

```
<210> 3276
<211> 2281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (62)...(1054)
<223> similar to gi3877677 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3276 atggctgatc gggggaggcc gagaaccgca gggactggcc gagaaatctc ctttacagac 60 aataggtgaa gaacaaaccc agaatcccta cactgaactg ctagtactga aggctcatca 120 tgatattgta cgatttctgg tacagttaga tgactacaga tttgcatctg ctggtgatga 180 tggaattgta gttgtgtgga atgcccagac aggggaaaaa cttttagaac tgaatggaca 240 cactcaaaag ataacagcta ttattacatt tccttccttg gaatcttgtg aagagaaaaa 300 tcaactcatc ttgacagcct ctgctgatag aacagttatt gtgtgggatg gtgatactac 360 cagacaagtt cagagaatat catgcttcca gtctactgta aagtgtttaa ctgttcttca 420 gagactagat gtttggcttt ctggtgggaa tgacctgtgt gtgtggaacc gaaaattaga 480 tetectgtgt aagaetagee acetttetga tacaggtatt aagtgeettt ggttgaaata 540 ccctaagaac ctgtgttgtg gcagcagttg gcaaagaact gataattttc aggttggtag 600 cacccacaga aggatcacta gaatgggata ttcttgaagt taagcgcctc cttgatcacc 660 aggataatat tctctcattg attaatgtca atgatttgag ttttgtcacc ggctcccacg 720 teggagaget gateatetgg gatgeeetgg actggaceat geaggeetat gaacgeaact 780 tctgggaccc atctccacaa ctggacaccc aacaagaaat aaaactctgt caaaaatcaa 840 atgacatttc tattcatcat ttcacatgtg atgaagagaa tgtatttgct gcagttggaa 900 ggggtttata cgtgtatagc cttcaaatga agcgtgtgat tgcctgccag aaaactgcac 960 atgactccaa tgtcctgcac attgccagac ttccaaacag gcagttaatc tcatgctcag 1020 aagatggcag tgtacgcatt tgggagttaa gagaaaaaca gcagcttgca gctgagcctg 1080 taccaacagg tttttttaac atgtggggat ttggaagagt cagcaacaa gccagccaac 1140 ctgttaaaaa gcagcaagaa aatgctactt catqttcact qqaqcttatt qqaqatttga 1200 ttggacactc atcatctgtg gagatgtttc tatactttga agatcatgga ctagtgacgt 1260 gctccgctga tcatctcatt attttgtgga aaaatggaga gcgagaatct ggattgcgca 1320 gtttaagatt atttcaaaaa ttagaggaga atggtgactt ataccttqct qtctaqttta 1380 aggaattaaa aatacacatg catgaacctt gaacatcaaa tatcgggtac tactctgaaa 1440 accattaata tattgatcac ttaaattggt aattttttt gtcagtccat aaaattctac 1500 atgtttaaat tttttgtgga cctaccaacc aggaacatgt tgcttctcag gtcctagtat 1560 atcctccaaa gaatatacca caagtttttc catttgactt tgagctgctg ttgaagtggt 1620 gagtgctgtg ttttgagctt attttgaacc tagatccttg tgaaaggtac aaatagaggt 1680 aatagttaag ttatggcatt tattagaagt tttattattt ggcttccttt agaattattg 1740 tgaagtttaa aaatagcctt tctcctgcaa attttcctag tctttagtaa ctgttagtgt 1800 tctatatagc acaaacttga atctctcagc caaaaaaggg aacatatata ctgtttaagt 1860 atggcaagtt ttctttggta ccaatttgtt tagataattt taaaaatgtt ttttagttct 1920 agctactaaa acctgtatga actcaaatgg ataggcatct tgtgagggtg tgtttttccc 1980 agtgtgaatt ggcttgaaga gccatgggct aaatgggtac tagaacaaca actgcccctc 2040 atgtacgcca aggatgagct ctagatcatt tgagaggcac agtgtttccg gagtcaggga 2100 ctggcagctg agcgcaactg ccccatctga ccactgactc aaatacgaac tgcttgagac 2160 agacttcttt tatgtagttc tttgcagtgt ccattgagac actataacca gccttgtaac 2220 aatatgtttt ctccttttgg tgctaaaaaa taaaaatatt agaaagtagt ctaaaaaaaa 2280 2281

tttctg

```
<210> 3277
     <211> 1206
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (16)...(879)
     <223> similar to gi3005087 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3277
agtcaggagt cttcagacag tctagctgca gagattgtta cacctgaaat cagggagaaa
                                                                       60
cttattcgtc ttcagcatga gaataagatg ttaaagctta accaagaagg ttcggacaat
                                                                      120
gaaaaaatag ccttattgca gagccttcta gatgatgcaa atctacgcaa gaatgaactg
                                                                      180
gagacagaga ataggtactt gtgcccataa atttccctct tactacggct tttgctgtat
                                                                      240
cccatagatt tcggctggtg aatcaaagac ttctggaagt acagtcacaa gttgaagaat
                                                                      300
tacaaaaatc tttacaggat caaggctcaa aagcagaaga ttcagtcctt ctaaaaaaga
                                                                      360
agettgaaga acatetagag aagetgeatg aggeeaataa tgaaetacag aagaagagag
                                                                      420
ccattattga agatctcgag ccaagattta acaacagctc cttaaaaatt gaagaattac
                                                                      480
aagaagcttt acgaaagaaa gaggaagaaa tgaagcaaat ggaagaacga tacaaaaaat
                                                                      540
acttagagaa agccaaaagt gtcatccgta ctttagatcc taaacagaat caaggagcag
                                                                      600
caccagaaat acaagetett aaaaateage teeaggaaeg agaeegaetg tteeaeteat
                                                                      660
tagagaaaga atatgagaaa acaaagagtc agagagagat ggaagagaaa tatattgtta
                                                                      720
gtgcctggta caatatggga atgaccctgc ataaaaaggc agctgaagat agactggcaa
                                                                      780
gcacaggete agggeagtea tttetggega ggeagaggea agegaeeage ageagaagat
                                                                      840
catacccagg ccacgtgcag ccggccacag caaggtagag aagttgtgcc gctcaatcac
                                                                      900
agacacetge acceacaaca taettetgtt acacacaaga acattteagg aaacteagee
                                                                      960
agcttatttt ttgtttctct tctatgtcaa tacttagtgt ttctcatttt gaggactttt
                                                                     1020
totototoot gtatotttgt tttagtttot ttggttttta ttttgtagto otttoagtta
                                                                     1080
```

```
<210> 3278
<211> 1159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1161)...(822)

<223> similar to gi3043572 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

tttttaatgt gccaaaaatt tgtacatgtt caattaaaaa tgttgtataa tagtgtaata

cttttctttg tatgaaaatg tcctcttctt caaaggtata ggctttgtaa tgaattagat

1140

1200

1206

ctgaaccatc ctcatctcaa aa

```
<400> 3278
ggaagccagc tgggccagac caggaaggag cctgaggcac agcaccaagg catggggtag
                                                                     60
ggtgggcttt gaggcacggc ctccccatgc ccagacccag gcccaaacag gaggctcctg
                                                                    120
tgcaccagca agtgcagcaa agctggctgc agtgacaagg aagtcagagg gagggctggt
                                                                    180
ttgcctcaac cctcgccctg gatgtggcaa aagataccac accgaaggaa gctgtagggg
                                                                    240
atctgggact tagtcaggct agctaagggc actgagtgat tacagggcaa ggccacagag
                                                                    300
cggcaggaag ttgtaagtgc aggggccagg cacagtctga gtggagagcc atgatggcac
                                                                    360
tcatccctgg ctggctcctg ggcccaggcc cttgctcaga atacagtgcc caggcccgcc
                                                                    420
tgggcattgc cttaattcct gtctgaggct gccttccgtc atcctcctca agctgactgc
                                                                    480
tatcagcagg agaagggaat gcagaaccac acccaccca actccagtgt ctccagaact
                                                                    540
gagcagggac cctccccatg acggagacag acaacccaat ggcagggcct gggggagttc
                                                                    600
taacctcccg agcccaagcc tgacttccct tccctctcca gatactgagg aaagtgggtt
                                                                    660
ggaggtgggc catgagggtg ggggacaggg ggagggagag ccatttccta agaagagccc
                                                                    720
aggttgtctc agcccaggga gactggtttc aggagctgtt ccttcagaaa ggacgatgga
                                                                    780
aatggaagtc acagcagggc tggggaactg gggactggtt aggttggacc catgggtgca
                                                                    840
gcaccctcca aactggtgtc agagcctgca gatgagtccc gggaggagcg gccctgcagg
                                                                    900
aagcggatga tetteteaat ggtggeetee tggtattegt gggaeeacet gtgggeacag
                                                                    960
gagccaatgt ggttcagaca gctgggcaga gggagctgct agtcagctgt ttgcccacac
                                                                   1020
tetgeetgte atggtgattt gtaccetace eccetggtee cagggeectg gggeteactt
                                                                   1080
gataccgttg aaagtaagca cagcctgcat gtcctcaggc aggacctggg gctcaggcca
                                                                   1140
ctcgaagcca tcaatgatg
                                                                   1159
    <210> 3279
    <211> 622
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (15)...(251)
    <223> similar to gil066818 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3279
caactgtctg cctgcctggt tgcctaaacc agagctgtgg ctccaactgc tgccagccct
                                                                     60
gctgccgccc agcctgctgt gagaccactt gcttccagcc cacctgtgtg tacagctgct
                                                                    120
gtcagccttt ttgctgctga tcaagtcccg agagaaccac catcctcaca caacacttt
                                                                    180
240
tctcacccaa atttttatga attctctaca tgtttaaaat cttgggaatc tgcttgaggg
                                                                    300
agggcagaat acttcatcct gattctcttt ttccttacac tttgtggatc atgtgccagc
                                                                    360
ttcgtgtgtt ctcaattttg agtcatggtc tcagctttga ctcaaaagtc aagagcttca
                                                                    420
ttctctgctt ctaaggaatt taggtttctg caactgatca ataatctttg caatcttttt
                                                                    480
tttggttttc aatatcctcc tcatcgttcc ttggtatcct tctttcttct tttcatgata
                                                                    540
aatttgtgtt gtgtccctgg gtagcagaaa atccttaccc ataatgtttc tgaataaact
                                                                    600
```

622

```
<210> 3280

<211> 3258

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2)...(2516)

<223> similar to gi5912060 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 3280 ctttgaggtc ttgtggtctg attcttcaat aacatcagta accaaatctt cctctgaagt 60 gacggaattt atttcaaagc tatgtcagct ctatcctgaa gagaacttgg agaaactcat 120 teettgetta getggteegg aegeatttta tgtggagega aaccaegtgg atetggaete 180 aggcctgagg tacctggcct cattaccttc tcacgtgttg aaaaatgacc atgtcaggag 240 gtttctcagc acttcctctc ccccacagca gcttcagagt ccaagtcctg gcaatccctc 300 cctttctaaa gtaggtaccg tgatgggcgt gtctggaagg cctgtgtgtg gagtggctgg 360 tatcccgtcc tcgcagagcg gagcccagca ccacgggcag cacccggccg gctcagccgc 420 ccccttgcct cactgctccc atgcgggcag cgcgggctca gccctggcct accggaccca 480 gatggacaca tcacctgcca tcctcatgcc ttccagtctg cagacccctc agacccagga 540 gcagaatggg attctagact ggcttaggaa actgcgtttg cacaagtatt accccgtctt 600 taagcagctc tccatggaga agtttttgag ccttactgaa gaagatctga ataaatttga 660 gtctcttacc atgggggcaa agaagaagct caagacccag ctggagctgg aaaaggagaa 720 gtcagagaga cggtgcctga acccctcggc cccgccgctg gtcaccagca gtggtgtggc 780 tegagtgeec eccaceagee acgtegggee egtgeagteg gggeggggea gecatgeage 840 agagctgcgg gtggaagtgg agcagccca tcaccagctg ccccgggaag gcagttcctc 900 ggagtactcc agetectect ceageeceat gggggtacag geeegggaag agageteega 960 cagcgctgag gagaatgaca gacgtgtgga gattcacttg gagagctctg acaaggagaa 1020 gccggtgatg ctgctgaatc acttcacttc cagttccgcc agacccacgg cccaggttct 1080 ccctgtgcag aatgaggcca gctccaatcc atcaggccac cacccctgc ccccgcagat 1140 gctgagcgca gcctcacaca tcacacccat ccgcatgctg aattccgtgc acaagccaga 1200 aagagggagc gcggacatga agctcctctc gtcttctgtg cactcacttt tgtctctaga 1260 agaaaggaat aaaggatctg gaccaagaag cagcatgaaa gtggacaaga gctttggcag 1320 egecatgatg gaegtgetge eegegteege acceeacag cetqtqeaqq teetetetqq 1380 gctttcggag agcagctcca tgtcacccac agtctccttt ggtccccgga ccaaagtcgt 1440 gcatgcatcc acgctggaca gggtgctgaa gacagcacag caaccggccc tggtcgtqga 1500 gaccagcacg gctgccacgg ggacgcccag cacagtcctc cacgccgccc gtccgcccat 1560 caaactgctg ctgtcgtcat ctgttcctgc tgattctgcc atttctqqqc aaacttcctq 1620 tectaataat gtgeaaataa gtgtgeeece tgeaataata aacceeegga etgetetgta 1680 cacagccaac accaaagttg ccttttctgc aatgagcagt atgccagtgg gccccctgca 1740 gggtggcttc tgtgcaaaca gcaacactgc ctctcccagc agccacccct ccacgtcctt 1800 tgccaacatg gccacagatg cccagctgcc cagcccccag ctccagcccg gcgctgtcct 1860 ccgtccctga aagcagtttc tatagcagca gtggcggtgg cggctccaca ggaaacattc 1920 ctgcctcgaa tccgaaccac caccaccacc accaccatca gcagcccccg gcacccccgc 1980 agcccgccc accccgcca ggctgcattg tgtgcacgtc ctgtggctgc agcggcagct 2040 gcggctcgag tggcctgact gtcagctacg ccaactactt ccagcacccg ttctccggtc 2100 cgtccgtgtt caccttcccc ttcttgccct tcagtcccat gtgcagcagc ggctacgtca 2160 gcgcccagca gtacggcggc ggctccacct tccccgtcgt gcacgcccct tacagcagca 2220 gcgggacccc agaccctgtc ctgagtgggc agtccacgtt tgccgtgcca cccatgcaga 2280 acttcatggc agggacggca ggggtgtacc agacccaagg actggtgggc agtagcaatg 2340 gttccagtca caaaaagagc gggaacctat cttgttacaa ctgcggggcc actggtcacc 2400 gcgcccagga ctgcaaacag ccgtccatgg acttcaaccg gccaggtact tttaggttga 2460 aatacgcccc tccagcagaa agtctggact ccacagattg atatttttcc tctggcaaac 2520

```
cagaacgtta tttaagccat ggagacataa ggaaaattaa atacaaaact gagaaggtct
                                                                     2580
agttgctgtt gagcttaatc tttttaatcc aaaggtgctt tacttttcct agactggata
                                                                     2640
gaaaatctag ccgtagaaag tgcatcaaac tcgatttatt gccaaaaccc tagattggag
                                                                     2700
cttgggtgtc agaactcgcc tagtgggcat ctctgtggct ggtgagatcg qccacctcca
                                                                     2760
cttttggttg cagtgcagag acgccatqtc tcccqaaqaq cattqccatc actggccctc
                                                                     2820
ctaggctcac acgtcaattc cagggcagct acacgtggtc tgaatcgaga accgagcttg
                                                                     2880
gagttctcca agtggagttc cacccgccgg actcctgaca cccctgggct agggaaaatg
                                                                     2940
tegaetttgt tttgttetgt teetaaagtg attageaeta atetetggga tttttaagga
                                                                     3000
ttgcactaca gaagaatgta coctgatgta aatototgog gttotgggag ccaaactoot
                                                                     3060
ctgagaacag tcagtgcaag agactccaat aatccatatt gaaagagtca gcaccagcag
                                                                     3120
aggetacteg acttaggacg caacagaggt tttagtattt cettecetee tecaageact
                                                                     3180
tgtagcagtt tcaggttttt aatttttttc tgcaaataaa tctaaactac gttattaaat
                                                                     3240
agaaatagtt tactcqca
                                                                     3258
```

```
<210> 3281
     <211> 1300
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1296)...(222)
     <223> similar to gi4519623 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3281
ttttttttt ttgccatttt caaaaaagat atagtagctt cagttgtaca ccaccagttg
                                                                       60
aaggggtttt catccaaatg agaaactcta ccccttgtct ctctagtgga acaggcacca
                                                                      120
gattcccaca agcagcagct cccatgtcct gtagcacgtg gcatccgacc ctggagtgaa
                                                                      180
gagtaagctg gcacagagcc ccgacgctgg gattcagact agatggcgtt tcgtggcgtg
                                                                      240
ccattgtgtg tcagcgcttt cagactggag gcactagtct ggtgaccaca gctcctgtga
                                                                      300
gaagtcacac ccacctcaaa aacctcatga atagcttttc qqaaacagtq qaagttqtaq
                                                                      360
tctattaaac cttttctttc aaagctttct tcccttagaa tgcagaccag tgccaaaaat
                                                                      420
ttagtcacct cctttaaata aaggacagtt gtattattca gcttgataat tgccatagat
                                                                      480
tctttgtcat aagcacttcc acttccatct tcctttaacc catatataca agacacatca
                                                                      540
attacaacat cgatcatgtc acagcaaagt tcataagatt gcatatccac aggggaactg
                                                                      600
tctgttgcaa tgtagatttt gctgacaaca tcaaaqaqaa aaqctttttc aatacctgaa
                                                                      660
tttgatataa agatatttaa taggttttcc aaggtcggca gttgtggaat gagtttctgc
                                                                      720
accaccttac taaaggcttc aaatattgaa tggtcataga tactagtcag ataaaagcta
                                                                      780
agatggagtt tttctagccc agcatctgca aggtcatcat tggccctttg atgaatgtcc
                                                                      840
ctctgtgttt ctattttgtg atcatcagac agaccatcaa ctttgtgaat aaaaacctca
                                                                      900
aaattcatgt ctgggttaac tttgtaggct ttagaaacag taatgtgaag tcttgttaaa
                                                                      960
gcctccatgt agtcatcctg tgcgtcaatg acgtatatca atgctcctgt tcccctqaaq
                                                                     1020
atcatctcat agtcaaaggt tgggtcaaaa aagtccattt gcccaggaaa atcccatatc
                                                                     1080
tggaaattca caaaggagct attggaaatg tcatccttat aaatcttgtt ggtactttcc
                                                                     1140
aaaaagaggg tctcgttggg tgacatctta tgaaacacca ccttctgqat qqaqqacttq
                                                                     1200
eegetgegee ggagteeeat gageagaate eteggettgg agetgteage geeeeegga
                                                                     1260
ccacageete egeetgeeeg gaegegtggg tegaeeeggg
                                                                     1300
```

```
<210> 3282
     <211> 3167
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(3168)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (3167)...(2950)
     <223> similar to gi299471 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3282
ggaattcgcg agcgcagggc gcatgactgg caggcagctc cacctgcagc cctggtgccg
                                                                       60
gatccactag gtgaagccag ctgggctcct gagtctggtg gggacgtgga gagtctttat
                                                                      120
atctagctca gggattataa acacaccaat cagcaccctg tgtctagctc aaggtttgtg
                                                                      180
agtgcaccaa tcgacactgt atctagctgc tctggtgggg ccttggagaa cctttatgcc
                                                                      240
tagctcaggg attgtaaata caccaatcag caccctgtgt ttagctcaag gtttgtgaat
                                                                      300
gcaccaatcg acactctgta tctagctgcc ctgatgggga cgtggagaac ctttgtatct
                                                                      360
ageteaggga ttggaaaege accaateage geeetgaega aacaggeeae teggetetae
                                                                      420
caatcagcag gatgtaggtg gggccagata agagaataaa agcgggctgc ccgagccagc
                                                                      480
attggcaacc cgctcgggtc cccttccaca ctgtggaagc tttgttcttt cgctctttgc
                                                                      540
aataaatctt gctactgttc actctttggg tccacactgc ttttatgagc tataacactc
                                                                      600
accgcaaagg tctgcagctt cactcctgaa gccagcgaga ccacaagccc actgggagga
                                                                      660
acgaacaact ccaggcgcgc aatgaacaac tccaggcgcg ccqccttaag agctgtaaca
                                                                      720
ctcaccgcga aggtctgcag tttcactcct aagccagcga gaccacgaac ccaccagaag
                                                                      780
gaagaaactc caaacacatc tgaacattag aaggaacaaa ctccagatgc gccaccttaa
                                                                      840
gagctgtaac actcaccgcg agggtccacg gcttcattct tgaagtcagt gagagaccaa
                                                                      900
gaacccacca attccggaca cattttggcg accatgaagg gactttcgcc tattgccaag
                                                                      960
cggtgagaca atcgctgagc agtgagacca tcacctattg ccgagcggtg agaccattgc
                                                                     1020
ctatcgccaa gcaaatcgag gccatcaagc tacagatggt cttacaaatg gaaccccaaa
                                                                     1080
tgagttcaac taacaacttc taccgaggac ccctggactg accagctggt cctqqcactt
                                                                     1140
cccctggcct agagagttcc cctctgaagg acactacaac tgcaaagccc cttcttcgcc
                                                                     1200
cctatccagc aggaagtagc tagagcagtc atcggccaaa ttcccaacag cagttggggt
                                                                     1260
gtcctgttga ttgaggggtg acagcatgct ggcagtcctc acagccctca ctcgctcgct
                                                                     1320
cactctcggc acctcctctg cctgggctcc cactttggca gcacttgagg agcccttcag
                                                                     1380
ctctgtatct agctactctg atgggtcctt ggagaacctt tatgtctagc tcagggattg
                                                                     1440
taatacacca tcagcaccct gtgtctagct caggtttgtg aatgcaccaa tggacactct
                                                                     1500
gtatctagct actctggtgg ggccttggag aaccttgtgt caacactctg tatctaacta
                                                                     1560
acctggtggg gatgtggaga accttgtgtc tagctcaggg atgtaaacgc accaatcagt
                                                                     1620
gccctgtcaa accactcggc tctaccaatc agcaggatgt gggtggggcc agataagaga
                                                                     1680
ataaaagcag gctgcccgag ccagcagtgg caacccgctc aggtcccctt ccacactgtg
                                                                     1740
gaagetttgt tettttgete tttgcaataa atettgtaet geteaetett tgggteeca
                                                                     1800
ctgcttttat gagctgtaac actcactgcg aaggtctgca gcttcactcc tgagccagtg
                                                                     1860
aaaccatgaa cccaccagaa ggaagaaacg ctgaacacac ctgaacatca gaagaaacaa
                                                                     1920
actocagacy cyccacotta agagotygaa cacttaccyc aagygtocyt gyottoatto
                                                                     1980
```

2040

ttgaagtcag tgagaccaag aaccccccaa ttccggatac aatatcgaca aaacatgcat

```
ctttgatgtc tgatagttac agagagaaga aattagttcc tgtggtttac ccccattcta
                                                                    2100
gcactccctc cttccagtaa ttcctggaag gagggagtgc accaatcgac actctgtatc
                                                                    2160
tatctactct ggtggggcct tggagaacct ttatgtctag ctcagggatt gtaaatgcac
                                                                     2220
caattggcac totgtatota gotcaaggtt tgtaaacaca ccaatcagca cootgtgtot
                                                                    2280
agctcagggt ttgtgaatgc accaattgac actctgtatc tagctgctct ggtggggcct
                                                                    2340
tggagaacct ttatgtcgac actctgtatc tagctaatct ggaggggatg tggagaaact
                                                                    2400
ttgtgtctag ctcagggatt gtaaacgcac caatcagcgc cctgtcaaaa caggccactc
                                                                    2460
agctctacca atcagcagga tgtgggtggg gccagataag agaataaaag caggctgccc
                                                                    2520
caaccagcat tggcaacccc gctcgggtcc ccttgcacac tgtggaagct ttgttctttc
                                                                    2580
gctctttgca ataaatcttg caactgctca ctctttgggt ccacgctgct tttatgagct
                                                                    2640
gtaacactca ccgcgaagat ctgcagcttc actcctgagc ccagcgagac catgagccca
                                                                    2700
ccggcaggaa cgaacaactc cagacacgct gccttaagag ctgtaacact ccccgtgaag
                                                                    2760
gtctgcagct tcactcctga gccagcgaga tcacgaaccc accagaagga agaaactccg
                                                                    2820
aacacatccg aacatcagaa ggaacaaact ccggaggcgc caccttaaaa gctgtagcac
                                                                    2880
tcactgcgag ggtccgcggc ttcattcttg aagtcagtga gaccaagaac ccaccaattc
                                                                    2940
cggacacaaa accetgtete tactaaaaaa tacaaaaaaa ttagegeggt ggggtggeeg
                                                                    3000
gcgcctgtag tccggctact cangaggctg aggcaggaga atggcgggaa cccgggaggc
                                                                    3060
ggagettgea gtgagecaag atggeaceae tgeaeteeag eetggtggae agagtgaeat
                                                                    3120
tctgtctcan aaaaaaaaag aaaaaaaccc attggttaaa aacaaaa
                                                                    3167
```

```
<210> 3283
<211> 875
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(876)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (50)...(317)
<223> similar to gi4262296 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3283
ggcaccactg cactcctacc tggatgacag agtgagaccc tgtctccaaa agaaaataaa
                                                                       60
agtaaagatt caccaagagg ctacctggct acataatcgt aatgactcta ctgctcaaac
                                                                      120
catctggggc tccatcagtg gatacctaca aagtatgaca tggtttttac ctttcttcgg
                                                                      180
accetaagtg gteatttaat tgetattaet tttggegtat tgtgttttta accttttggt
                                                                      240
gaaagtttgt gtctttcagg tttcaatagc tccaagtcaa gctaatgatg gcccaagaat
                                                                      300
tecaacecat aacateecag ggageacece agteectaca gggtetttag ggacagecag
                                                                      360
tgaggagatt tcccccaccc ccctaaaagt tagggcaggg gacggacatc ccctgtttca
                                                                      420
ggcagggaag ttcggtttca ggaaggttga ggtctttcag cccttttctc cttaagaaat
                                                                      480
agagggtgaa atctcctcag ggggaaatag agataggaac aggaaatggg atgggggttg
                                                                      540
cttctttcat gattacttta accaatgcct tcttacttta aagttctagg aactggcctt
                                                                      600
aggaaatcta actatgaaac caaggttatg gagtatccca cctcaggaag gaacactgaa
                                                                      660
caactgattg acagtettet tgccgccage cagaccacca agtggcccat taaccaagag
                                                                      720
aaccagegea accagataeg etgaeeegea teteetaeet eteatgtget ttgeeeagee
                                                                      780
```

```
<210> 3284
<211> 2202
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(1707)
<223> similar to gi5441764 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3284 tcaaaatgaa aattcagtgg acaagtgggg aaaaccttta gtgattgata aactcaagga 60 aatggccaaa gtcgagggtc tctggaactt gtttttgcca gctgtcagcg gactcagcca 120 cgtggactat gccttgattg ctgaagaaac aggaaaatgc ttttttgctc cagatgtctt 180 taactgccaa gcaccagaca cagggaatat ggaggttctg cacctgtatg gaagtgagga 240 acagaagaaa cagtggcttg agcctcttct tcaagggaac attacctctt gcttctgtat 300 gacagaacct gatgtagctt caagtgatgc cacgaatatt gaatgcagca tccaacgaga 360 tgaagatagc tatgtaatta acggcaaaaa atggtggagc agtggagctg ggaatcccaa 420 gtgcaaaatt gcaattgttt tgggaagaac tcaaaatact tctctctcca ggtaattaaa 480 caattotgat tgagaaacot gtgtaggaat gagocagtot tootootato taggtaattt 540 acttaaaatt cactgtttgg actcacaaat cataatgtaa gatatgagag taaatgtcat 600 atatttgtat ttcacaagta ttttctaaca ggtgtttttg gaaaacatta tagggagtat 660 tgctgaacat tcttcgctgt ggaattttca gtattagaaa gtgttgctaa attatcaaag 720 ctgtttggat taaattatca gacaaatttt ttcaqacctq tqtaatqaaq tqattaqatq 780 tttagatcaa aggcaataat cttgaaatgt ttaattatat atataagttc ccagttacca 840 ttgttgagca gtgagaagct tcaatcaaac aactcattta ttttcaaatc attgtttctg 900 ttccagatca cagcctgcat cagactatgt tggtgtacgt cttttacaca gttcccattc 960 cagtcatcac tgcttacatg actacatgaa aacatcaaaa agacaattgg gattctgctt 1020 attatctgtt ttatttttct tcttagcaaa ctttttctaa tacaattttt cttttgacta 1080 gacacaaaca gcacagcatg attcttgttc ccatgaacac acctggagta aaaataataa 1140 ggcctttgtc agtttttggc tacacagata attttcatgg aggacatttt gagatccatt 1200 ttaatcaagt gcgagttcct gccacaaatc taatactagg tgaaggtagg ggatttgaaa 1260 tttcccaagg ccgccttgga cctggcagaa tccaccactg tatgagaaca gtaggtttgg 1320 cggaacgcgc tttgcagatc atgtgtgagc gggcaacaca aaggatagct ttcaagaaga 1380 agttgtatgc acatgaggtt gtggctcact ggattgctga aagccgcatt gccattgaga 1440 agatccgctt gttgactctg aaagctgctc acagcatgga cactctgggc agtgctggcg 1500 ctaagaaaga gattgcaatg atcaaagtgg ctgccccacg ggctgtcagc aaaatcgttg 1560 actgggccat ccaggtgtgc ggaggtgctg gtgtttccca ggattaccct ctggctaaca 1620 tgtatgctat aacccgagtt ttgcgtttag cagatggacc tgacgaagtt catctttcag 1680 caatcgcaac aatggagctg cgggaccaag ccaaaagact gacagccaag atataaggag 1740 ggtggcactg ccacatccca ctggcagaaa ctctccttta tacaaacttc attggctcca 1800 acatttgaat ctcatatttt tgtagcagtt tgagcacagg gttaattatt catttgtggt 1860 aaagattata gcatctattt tgatcagtgg gttttattat ttcaagggtc acacagggtt 1920 aagttcagta agaaatgctg tagctgttgt cattcaatct agtgcctcct tgaggccagg 1980 agttcaggac cagcctgggc aacatagcga gacccccatt gctacaaaaa atttaaaaat 2040 gaaacaagtg tggtggcaca tgcttgtagt cctagctact tgggaggctg aggcaggagg 2100

```
<210> 3285
<211> 2725
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2525)...(1487)
<223> similar to gi4127947 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3285 agccaccagg caagaaacct tcagggtgat tatgtgtgtg ctttttttt ttttaatagt 60 atcattcatt tgtacagaga aatcatttgg atggatctat ttacagtctt ttctgattat 120 catttccact ggccaaatat atttcacaga atagtcaaca ctgacttgaa ttgatcacca 180 ttataatcgg gcttttactc ctcctcccc ctttcaaaga tgatgatccc attttaacag 240 aaacattttg taataaaaga ttcaccagtc tttttccatc ttatgactaa atccaccaaa 300 atttatttaa tatggtcaaa tttttaacac atttcattgt ttcttttcaa actcattatt 360 tgcaggtatt gcaaaccaag gcaaataagt ccacggtccc ctcgagcctt ctacaactta 420 ctgacacgcc ctcaagttga ggcttctcct atctcctttc acacttgtga aatgtctggc 480 acaaccagac attttacttg aagacaaaac tactctcttt tcctctctt ttcttttaac 540 tcactaccaa tcaccttccc tcttgcattt cagacaacac taaaactttc aacaaaatct 600 ttgaagtggt tttctttcag tagtctagaa tacatcaagc catttcatgg gtctttaccc 660 tgaaatgcta cactttaaaa atggcaattt ttttaattgg ctcaaaaaca gtatggcttg 720 gtttcacttg gtaaaattaa tgtgatttaa aaaaatatat atatatacac acacacac 780 acatacacac acatttttaa tcaggaagaa aaatacttta aagacatgcc aatttgaaaa 840 ggcatcaaag taaaaaaata aaagcaaatg ctaaaaacta ctttacaata aaaaaattaa 900 ataatcggca ggttaaatga atgtaaaatg aggaatgtac agtgaaaaac aaactaatat 960 aaagcattcc agttgataaa aacctcctca ggcttatggt ttgttttcca aggaaattat 1020 gtttcaatgt aaagtttgaa atactccaga catacattcc atgtaggttt tgggtgccaa 1080 tgttaaaatt tcaaattttg catgcaaggc ttagcaaaga aacactggca gaattccagc 1140 atttgcaaaa ttctaagttt tggtgaatat tgtaaatatt acaattggta ttaqaaagcc 1200 atgatgaatc cagaattaag agaaaaccca tttcataaat attttgtttg attaaaaaat 1260 accaggetta ecatgitta aataatteaa gaaaatatet tiaaaaaaaa aaggaetgea 1320 atttaacagt aatctgtata tctttagctg ccattaaaaa aagaaaaaag aacaaccaaa 1380 aacaatgaaa atgttacaac tggtataaag taaccctatg atgctcccct tacgagaaaa 1440 caaaactgta cacatttata aacaaacagt ctctcccatc agttaacaca cagagccttc 1500 tctacaccaa agtctctttc cgtttgccac cagaaagggc tttgtccctc gctcttcgga 1560 tgccgggctg tgtctggtgt gtctttaagc tcttgctgtc ctctgccatc tgcatgccag 1620 agccacatct gtaagcgttt tcatcaactt ctacctgagt aacactggaa actgtggatg 1680 ccctcctctg ggctgtgagt ttcctcgcag aggggtggtt cccctcacac tcttcgtgca 1740 gctccggcag gccctgcagc tcaggtggac tgcctgccga ctggaagggg gcaatggccg 1800 ctcgaataca gttgaaccac tgctgcttgt ggaacacgtc attggcttgc agagtgtgag 1860 actaggctgg agaggggtca tggaagcgaa ttctaaagat atttttagct ttctctgagt 1920 tactgaaagc tcctcgaaag gagcctccca ttctcacatc tccatcctgc aggtcttcta 1980 ggactagete ttggactggg attggetgee ggtaaacetg gtaagagtge egttegttee 2040 gtgtgacggg ccgagtcaga accaagatgt cttgaaacag gaaaatgtaa agtttatgtc 2100

```
cactettget eegeagetee ceatggcaca geageaettt getegetteg attetggggt
                                                                     2160
ccctctgctt ttcatccagg tactccagct tgtcgatgta atactggcac tcggattcac
                                                                     2220
ctttcttcaa gttgatatca gagaggactc cctgtattat caatatagca tcctccagaa
                                                                     2280
gctgaacatc agggtgctct tttggagtgt gtttaagaat ttcttttaac agtaaagggt
                                                                     2340
atttgactag gcgacttcga gggatatcta ggaaactcca aagatctagt tttcgactga
                                                                     2400
agggagactc gagacatcgc tggaggaagt cttggactct tggatcctgt ttcttttgat
                                                                    2460
caagaagagc tttggctgcc agctggttac tacagtaacc tctgtaggca ttcaagcgcg
                                                                    2520
gtaactgaag agtaataaaa gaaaaggtat gatgtgttcc tgttatgacc gagtgcatta
                                                                    2580
acaagcctgc aaacatgaaa cacaaaatgt acagctattc ttgagagttt taacaagctg
                                                                    2640
tggacatttt ctggcagata ataatggaag ctgaatagca ttttagcaat catcaaaatg
                                                                    2700
ctcttcaaat tttcataatt tggct
                                                                    2725
```

```
<210> 3286
     <211> 385
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (19)...(347)
     <223> similar to gi1619929 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3286
aaagatgaat acataagtaa atcacattcc tatatattag caatgaacaa gtagaatttg
                                                                       60
aaatgaaaac acaacacat tacatcaaca cccccaaaaa tgaaatactc aggtataagt
                                                                      120
ctaacaaaac atgtacaaga tctatgtgag gaaaactgca aaactctgaa agaaataaaa
                                                                      180
gaggaactat aaatgcatga agagatattt catgttcaca gataggaacc ctccatgttg
                                                                      240
tcaagatacc agttcttccc aacttgatct ataggtccaa agcagtgcca atcaaaatcc
                                                                      300
cagcaaataa ctctggatat tgacaaactg actctaaagt ttatagatag aggcaaagac
                                                                      360
cccgaatagc caatacaata ttgag
                                                                      385
```

```
<210> 3287
<211> 2744
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2745)...(499)
<223> similar to gi2565046 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3287 ttttttttt ttaagttcaa aagtacattt atttaaaatg tgggcaagat atcaatataa 60 aagaaaacag agtataagaa ataaaaataa tcaaagtaca aaacatttca aatctttaac 120 atccataatt tagagatagc aaggtettta tttacaccat tttattteta gtttgaagte 180 ccgtaacagt tttgtgaaaa catttaaaaa cctgggcaaa tgaatcataa aacctaatgt 240 ggggctctta aagtcatata atacaaaaca taatttatgt ttccctcagg attaaaattg 300 caccatcttt aaaagggtgc cggtatattt attatatcct gtccttcccc gcttcacagt 360 ctggatcccc caggaaaggc agctgggaaa accagagcct gtgaagggaa gcgcagcagc 420 tteetegeea gaccagaaca gecageeeeg cacegeagga agteegacat geaeggeage 480 ctagacgccc atagttaaac cttatatgat tcatagtcca gcgtttgagt gagcacttca 540 gtcagaacga aactctgcat tgtgaacatc tatgccctct ggcaaaatat tcttcggata 600 aaatgaaggt cattttccac aggataatta aaattatttc ccgaacaaac tcgaagttcc 660 tgcttgtgct cccatgagct tccggaaaga tggctqcctt ggataacacc tttcctcctg 720 cacactctac gattgccttc atagtggaaa gacttgggca gattcccagg tgtgatgtaa 780 aaatattttg ccttaaagag tggagaaacg tgtgcccgtt ttaaggattc ttccaagctg 840 aaagagaaaa gtacttctgc ctcagcatct cggagaatgt agttctgctc atcaatgaac 900 ttctgacacc tgaagcattc ttccagccac tctggcgtca ctatgtgctt cacgacagaa 960 atcgcccgcc aggaacttca cggtgcgagt cactttgctg qcaataaggt gtgtgcactt 1020 ctgtgcagac tccgcaacct ctccaccaag aatgtagagc ttcttaaata tactgttgaa 1080 cctggacagg ctcgaatcca gtgaaaagca caaaaagggg tcaattcttg gagttagctt 1140 tttagtggga ggtggtacgg tcttcaattc tggctctttt ggaagaaagg ctggacatta 1200 gctacttcat tctgtttcag tttgggaggt agtcttatac tcatcaacaa ctctgcagac 1260 acttttaagg gaactctcca agcatctaaa agatttaaaa ctaaatgctg ggtagggca 1320 aatggatcct gcagactgaa tgccgtgtag cgactatact gaatctgcct cagtgcctca 1380 aagtttccca gaagaatgtc gccaagccac tgggcgttga cacagggtat cctccactct 1440 ttggcttttt catactttaa accagttggt tctttacaga tgaggactgt gttgctgcgg 1500 catagataac ccgtatattt ggcacctgcc aaataagcca ttaattttag gtcatctctq 1560 tcactatcaa caaatccagt cacagaaata atatgctgtg aacatggctt tcctcctggt 1620 gggaaggcca ctgggaagtg aagggctcgg tgcggcggta ccattttctt cttctttaag 1680 actgtgttta accagtgtgc agtaacacat ctctttcttt ctcttattgc ctgtgcatac 1740 gcgctgctga cttgactctc acagagaagg tgcgtgcatc gactcgtgaa ggtggggtca 1800 acagtgccgc catgtgcctg gattatcctt ttccaggtgg ccagcagttg cttatcagac 1860 atctgctctg gataatccgc aattgcaaac acacatccca ataagaagcc ttcttctgga 1920 atctccactg ctggatcatg tccaaaaagc tgatgctgct gaggcgatgg tggtqqctgc 1980 tgttgctgct gctgctgctg tgaaaatgga tgcggcggct gctgggggta aggttgctga 2040 gagatetget getgetgetg etgetggage tgeattatet getggggetg aaggtgtaaa 2100 acceggetect geteeteete etgetegee teeteeteet getetageat gtetetet 2160 ggagtcactt tcacttggct aaacagcact gcattggcat ttgtatgtcc ctgctggctg 2220 tgattcacct gctgttctaa atttttcgta ggtgctgaaa gagtctgtaa gatatgtgct 2280 acatttgatg gccggttcat ctgctgaatg tcagcattat tagtaatatt cctcagtgtc 2340 cgtacagctg gactccaggt agctatcatt tctgatcttt cagaactttg gaggttttgt 2400 ccagcagcca ttaaattacc ccggacctca gggggcaaaa tgttacctgg gacgggtggg 2460 acattggcac acaagttaat caacccagge teettteeet gaggeageet gegttttget 2520 gcagctaact gtgggacttc ggccggggtc cagtttaaat ttctctcctq tttttccqqt 2580 gatgaatctg aagaatcatc aaacattaat teeeetttag attttteagt gttqqattta 2640 ggagaaaact gctggtcacc tgaaggagac ccttcttgag agctggcagg gcttgacttc 2700 tcatctgtac taccctcatt ctgagaatct tgttcctcat tttc 2744

<210> 3288

<211> 1624

<212> DNA

<213> Homo sapiens

```
<220>
     <221> misc feature
     <222> (1)...(1625)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (63)...(1286)
     <223> similar to gi3766257 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3288
gagaatgtct tgccacccaa tgtaacaaac acctctgaat ttttttttgt ttttgacagt
                                                                       60
tttttgtctc acctaatctg gccacctttg ttttgagcgt ggtgcctcca gtgtcaatca
                                                                      120
ttgctgtaat ttatgggcga tatctacgga aactgaccaa agtcactcag gattccctgg
                                                                      180
cacaagccac tcagctagct gaggaacgta ttggaaatgt aagaactgtt cgagcttttg
                                                                      240
ggaaagaaat gactgaaatc gagaaatatg ccagcaaagt ggaccatgta atgcagttag
                                                                      300
caaggaaaga ggcattcgcc cgggctggtt tctttggagc aactgggctc tccggaaacc
                                                                      360
tgatcgtgct ttctgtcctg tacaaaggag ggctgctgat gggcagtgcc cacatgaccg
                                                                      420
tgggtgaact ctcttccttc ctaatgtatg ctttctgggt tggaataagc attggaggtc
                                                                      480
tgagctcttt ctactcggag ctgatgaaag gactgggtgc aggggggcgc ctctgggagc
                                                                      540
teetggagag agageeeaag etgeetttta aegagggggt catettaaat gagaaaaget
                                                                      600
tccagggtgc tttggagttt aagaacgtgc attttgccta tccagctcgc ccagaggtgc
                                                                      660
ccatatttca ggatttcagc ctttccattc cgtcaggatc tgtcacggca ctggttggcc
                                                                      720
caagtggttc tggcaaatca acagtgcttt cactcctgct gaggttgtac gaccctgctt
                                                                      780
ctggaactat tagtcttgat ggccatgaca tccgtcagct aaacccagtg tggctgagat
                                                                      840
ccaaaattgg gacagtgagt caggaaccca ttttgttttc ttgctctatt gctgagaaca
                                                                      900
ttgcttatgg tgctgatgac ccttcctctg tgaccgctga ggaaatccag agagtggctg
                                                                      960
aagtggccaa tgcagtggcc ttcatccgga atttccccca agggttcaac actgtggttg
                                                                     1020
gagaaaaggg tgttctcctc tcaggtgggc agaaacagcg gattgcgatt gcccgtgctc
                                                                     1080
tgctaaagaa tcccaaaatt cttctcctag atgaagcaac cagtgcgctg gatgccgaaa
                                                                     1140
atgagtacct tgttcaagaa gctctagatc gactgatgga tggaagaacg gtgttagttt
                                                                     1200
attgcccatc ggtctgttcc acccattaag aatgcctaat atggttgcct gtccttgacc
                                                                     1260
caaggaaaaa ttacctgaat agggaaaacc atgaagagcc tgcctttcaa aacccaaatg
                                                                     1320
ggatatacca gaaaacctaa tgaacaaaca aagttttatt tcagcataag gaagcaatta
                                                                     1380
ctggtaaaca atatgagact ttaatgcaaa acagtgttgc agaaaaaaaa ctcagagact
                                                                     1440
atgaaataca taaaccgata tatcaagtta tttgaaaaat acctattttt ttccaaagtg
                                                                     1500
tgtaaaagat tgttttgaaa cgtacctgtt ctcaagatct ttttattcag agttttaata
                                                                     1560
attgtaactt tttaaatgtc tatagcactg aagttatttt caggttttgt attntctttt
                                                                     1620
cttq
                                                                     1624
    <210> 3289
    <211> 4747
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (4748)...(573)
```

<223> similar to gi3288457 in the genepept database release 114,

<400> 3289 ttttttttt ttgaattaat tgatgaggtt tatttgattg tctttcttat aaaatacatt 60 aaaaatactg cttttaactg taggcacaca attaaaacaa atgtaaacct atgtttaatt 120 taaaaatatat taaaaatgatt taataaaggt cttttattat tttacacatc aaatttcatg 180 caatcagtac tccactgaag gagaaaagga ttatgaaaaa acaatgaaag cacagggtag 240 gaaaataaac aacacaaaag actaattotg gatttttttt otgtgtoott aatacootgt 300 gctgtctttg acaacaaga tgccttactt atgtgattca gaggcccgga agtgaaaaa 360 atacaagtag ttaatgaata atgcatatgt tcatagcaat ggtcaaatta tactgtttcc 420 taatggatac catttttctt tatcgagtgg gacactacag agtcggatgt taattqctcc 480 cacaaataca gttttactct tcacaataag cattaagaca tgtccttgga qctctgtgac 540 ttcatcatat actacaattt cattgtaagt ggggtccgta cattttggaa cagattttgt 600 tttcctccta cgaacttcac tgggatatgg taaaagataa aattcaacat gtgcactggg 660 cgcagagcca tctgggagat gaatgttttt catgtgtttc actagtatqq tcaqcttcac 720 atcctcgtag gatatgacta actgcacctt aggcttcttg tctggaaact tctcacctag 780 gtacacaggt gatgattett caactgtttg ttgeecagee teagagagga aaaagetaag 840 tacacaatca ctgtttgtaa cttcatgtga tacatttaat atctgttcca tgtaatgatt 900 tagatetetg aatettetgt gatetgaatt tqtaaaaqqt aqqtqccace aatqaqqaaa 960 ctctgggaga gtcagtgatg caaactgctt ctgaagttgg ctgtgaagtt ttgaaaactg 1020 ctcaaatgat ttttctgtca ggcttgtttc gttgttgctg tgtgtcacct ggatcagata 1080 cagattactg gatttcttgc tgaaccctaa aattgttgct ctttcaatcg acctagttgt 1140 actcagcaaa caggattcct gaggaaaagt ctgtgaagta gatttggcag ggcttatggc 1200 tgacatttgt gcaagtgtgt ggatcaagtt attcaattta acagggaaac actccagact 1260 ttcctttatt ttcttggtaa aatgacttgt tgcttccagg tctgtgtctt gtggacgaag 1320 attattatac acatatttca ggtcttgaaa tcccacttag ctcaggcagt ccctgcatac 1380 agcatcattt cccagcaggt tccaagagca gttggctgtg ctttctgata atattataag 1440 cacgacagca aagttcccac aaaatcttga aaatgctgtg ggtttttccc caccctctgt 1500 aataaagtat toocatotot gaagtaaaaa tgaaaggago toggtooott tttatoooto 1560 caaatgtttg tgcatgacct aagaattttc caaagtcaat atgaaacatg tggcccgact 1620 ttgtcagcat gatattatca ttgtgacggt cacatactcc caggatgaat gttaccacac 1680 accagecage acaggagtag aaaaagttee teaaggeett tteataatet geetttaagt 1740 ggttgtgctg actgaaccac tttttaatgg tattttcttt caatggtcct atcagtccag 1800 aatggcgatg aatctttgct agggtcacag catcaggtac catctgcacc aatcgttggt 1860 cttttcctgt ggatagacat ctataaatga tcatttgcat atccaagcct tcctgcagcc 1920 aaatattgtc catcacttga ataagctgca gaacaagcat atcctgacga agatcatctc 1980 cagccttaaa aataatgctg atgtttttgc ccatcagatt agcattgatg aaagtaatct 2040 tcaatggcaa agcattagat gtaaaatatg aacatgcatc gtgatcaatc ccttttatac 2100 atagggcagg gttcagagga agatgacaag tatttacatc ttgaaagaac tcttctagtc 2160 tgccaattte tttetteagt aceteetgte tttgatggte actggeagae ttgaetettt 2220 ccccaatatc tcccagaatt ttgataagtt tctgctcctt ggaaaactca tcattcaagg 2280 ctttacctgc acagaattgg agagcagcta gtagcttctg ataccagctt ttaaaataag 2340 cttcattttc tgcatttttt agcagccagt aaagacgatg ggcaacctgg atgctctgca 2400 aggagcggtg gagtagaagt tgcactaaag gactctcaag gttccattca aacttgacag 2460 cctgaactag ctgtgggaga tattccagta gttcatcatt caagaggttg tctaattgtt 2520 quactgccac tttacgaatt tcttgatctg gaaaactgga agtcaaaagc ccaagagcct 2580 ctaaaggttg agaaaatgtc catcttctca aaatggtatg catttctgaa acagtccttt 2640 catcccatcc aggggcacta cccaggacta aaggaaggga gcagttttca ttattgcagt 2700 agaagcgata aaaccataaa tatcttttct tttcttcaga gagtagtagg ggagtctgtt 2760 tetgtgaaag tetggeaata tgttttatae acteetttag tggetettea agattaette 2820 tattctcttc agaatcaggt ttcatatact cccacccagt agctggaaaa tcaatctgca 2880 gggtcaccgg ggatggctga cttacatccc acactcctgg agttatcatt tctacgggag 2940 gctcactctg taatgtcatg ctgaacagca tagacccgag aatggatttt tcttttggaa 3000 acagtggaag acaagtccac gccagtaaat ttgcattgtt ggttgcacag gcaatcccaa 3060

<210> 3290

```
acagttttac agtgagcatg gattcccttg gaagtgactt tatttcaagg ggaaaattga
                                                                     3120
tcctgtgcac ccaggtttct ggaatgttgt gtgctgcata cactgtgaag ctgaggtggg
                                                                     3180
aaggaagccc gggatttaga taggaagtgc atctaggtac atttacaggc tgaaaatctg
                                                                     3240
cataaaagct gttacagtag acattgatta gctggtagat ggatgtggat agttcagttg
                                                                     3300
ttaccttctc tatcaagcct tttgctgaag tctctgaact ttgataaaaa ttctctctt
                                                                     3360
ttctctgaag aattagactt agttcattta ctgcatctgt aatttgtttg gtttccacac
                                                                     3420
accetagaac actgeatatt tttttaaett etteaataat attataeaeg tttteetggg
                                                                     3480
ttttcaatag gtatttcagg tggaagtcat attttctgat gagtgttaag agacattgtc
                                                                     3540
tggatacttt ccaaatatgc ataaattcta gaagttgatt cagataaaac tgactgtggt
                                                                     3600
cetetteatg etttegagat agettteetg gagetteett aettttetge aggtggaget
                                                                     3660
gaataacaga tttatctttt tgaaacattt tgtggctccc caaacagtgg tcgttttgta
                                                                     3720
aaaattcttc agagccccat acacttagaa tatgatcttt ggggagtagc tggtcatttg
                                                                     3780
tgcaaaaatg cagaatttct gcaattagat ctttgacaag ataattagca catggcataa
                                                                     3840
aatgaagagg ttgtgttgag ttatcaataa aaatatgtat attaaacttg gtcttagaaa
                                                                     3900
agagctgata cggaaatgct gtagtagtgc tccagatctt cccagaattg aaattaacat
                                                                     3960
cagctgcatg atatctttct ctgatttttt ttactttgtt gcaaaaagag gccagactcg
                                                                     4020
tattgctgct ttgaggtact tccactagct gaatggaaca acctattgac tctatattct
                                                                     4080
tctgccatgt actttcccac attccgggtt gaagagagcc tttcaaaagc atcaaagatg
                                                                     4140
gttccacaat gttcacatgt ccactccttt tattctcttc tttcggcatg aagtcacttg
                                                                     4200
agaaggatga atttgttgga ggaatgctac tttcaaatcc tatatggtag ttatgatttt
                                                                     4260
cattttctaa ttctttctct agattaattt tatccaaact tgtgaatgat ggagctaaaa
                                                                     4320
tactgaatct ggaatcatca gcaccatgat gttttcctat ggggcttccc caggagcatt
                                                                     4380
ctttattcgt attttgaggt tttggtaaca cagaaggact aaaaccaatt gctggtgctt
                                                                     4440
tgctaacttg atgccaggag agttcacggc ttttagaagt gaattcattc aaggatattt
                                                                     4500
ggtgtgcttc atttaatgaa tgccctgttg agtcccattt tggtgcagtg ggcacaaaaa
                                                                     4560
aggtgttttc atcaatttca ctctcgtagt gtggaatttt gccactgatc tcatctacta
                                                                     4620
tctgatcaaa acccagactg acttggctag aagaatgggg ttgatttaca aagagaaatt
                                                                     4680
cttggtgttc atactgcttt tcgtgtgatt cattaggatt tggatccgtt tgccaagaat
                                                                     4740
atgccat
                                                                     4747
```

```
<211> 2817
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2818)...(1352)
<223> similar to gi4309889 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3290
aaatgttcca gctgatgatg tgtctggaaa taaacatgaa actatttata caatactaaa
                                                                       60
tcaggacgcc cagaacaaga gtcccagcgc ggtcatgagc cacgaatcgg atgctgctca
                                                                      120
ctctgacagt gccaggtcat cttccagcaa gttagaactc tcgcctgatg ttaacaaaat
                                                                      180
aaggaaatca gagcccaaga tcaagaagtc tgtaagtcat gaaaqagtct ccaaaatgaa
                                                                      240
tttttaattg actggaaaag ggatcacctt tttctcatct gagagcaaga aatatgagag
                                                                      300
acccaaggat gatcgagagg aagagttcaa cacgtgggtc aataatatgt acgtcttctt
                                                                      360
tgtgaacacg ctctttcatg cgtataaacg tgaagaagct atcaaggaga aaataagggc
                                                                      420
agacaggtta cgtagcacag cacaggccca gcagcggaag atggaagatg acgaactgga
                                                                      480
```

```
agcaaggctg gacatcttta tcttgagaga ggaagaggcc aagagacatg actatgaggt
                                                                      540
ggacatcaca gtgctcaagg agccggcaga cgtgtcatcc tctcacctca tactggaccc
                                                                      600
tcccaaggag gatgtgaccg tgtccccatc cagcaagacc atcaccagca agaagaagaa
                                                                      660
aaagtagaga gacacgagga cacacaca ggcttaggat ggcacgtgct gtaagatttc
                                                                      720
ctgagcatta cagttcttag cactgaactc gtcacagtgt tttaacatac cccttggccc
                                                                      780
actgcatctc aggtttccta catggctgga ttacgggagt tcgagaccag cctgggcaac
                                                                      840
atagtgagac cccccatct ctgcaaaatt aaaacatcag ccgaccgtgg tggtgtgtac
                                                                      900
atgtggttct agcttcttgg gaggctgagg tgggaggatt gcttgagctc aggaggttga
                                                                      960
ggctgcagtg agccattgca ttccagcctg ggtcacggag ctggtggcca gtgtaatcta
                                                                     1020
taaataggca gcaggagaga gactcaacac caaaccagaa ttttaaaaac ttttaacaat
                                                                     1080
ttattagtct tattttccag taaaatattc acagagatgt caaaagaatg agatggtgag
                                                                     1140
cgatatagcc aactaccttt aattaattcc acataaatag ttaagatcta aaaacctcag
                                                                     1200
atgagcagac cgagtcgaaa tgtgattctt caaagcaagt attgctttac ccttgtcctg
                                                                     1260
aatgcagtct gtcatatgac cactaatttg catgtgacca aatggttqca qaqtqttttt
                                                                     1320
tagatatgct ctcggtgagc cgtcatccgt caatccaaga agaagatgtt gttgaactgc
                                                                     1380
gttgcacaaa gtttcttgac ctcttcattt acttcaatca ggtttgcatt tttttgattc
                                                                     1440
aaaataacat agagctcccg ccgatcagac ttctttccaa caacccagta atcactcatg
                                                                     1500
gccttcacaa tgatctcctc atcttcatcc actctggtaa agtcactgtt gatgtcaccg
                                                                    1560
agaatettea ttaaateegg gtgeaeggaa gtgagegaea egetgggegt ttteeteatg
                                                                    1620
tqaactqtqc tcttctcggc gagattcatg tggttgaagt agataaactt aaactggggt
                                                                    1680
tcctttcctc agaccccgga acatccccct tgttgatgtt aaaactgttc cacaagatgt
                                                                    1740
ccagaggccc agccactgtg aagctggggc cccaacgatg ctgtcccagt ccttcggcaa
                                                                    1800
aaaacccaac gttgggtgga cagaggcgtc gatcataaag cacacagccg cactcatggc
                                                                    1860
cttataaacg gattaaatgg agctcttcat aagtgtcatc tgtatttaca aaaattttgg
                                                                    1920
ggaatctgca ttttgcatct ggatcattga ggttcaaggg tccggtaaga aatcttccat
                                                                    1980
agtgttgaag atttcctggc atttctgctc ttattggaga atcccttcct gctaactcag
                                                                    2040
gttcggatgt gccttgggaa aagggaggtg gtaaggtatt tgtataaaat tctcatgtca
                                                                    2100
tcttgttcta atccactcca gatgagctga tcgttataga gaaaagcagt gtatttgact
                                                                    2160
atattcaggc tttcctccat tcgtattaat aaaggactgg attttcaaat aagtcatttt
                                                                    2220
atccaacggg aagaagctga ttccaccaaa aatgtcaagt aggtcacatg actgcaaatg
                                                                    2280
tagcgtttgc aaataccgat ggaagaattt ctctaatctt tctttcagaa gcttgacgcc
                                                                    2340
tccgtcttcc atggctttca gaaatgtacc attaaaaagc ttgtacatgc tgtagcactg
                                                                    2400
ccgcagcacc gagctataaa ccttgtccaa caactcctcc tcttgatatt caataactgg
                                                                    2460
ttttccatct ttactctgtt tttcaattat aggattccga acaaccatga ccatccagaa
                                                                    2520
attttcttct ggttcattga agaactgtct gttcttctgt gtatgtaaag attttgcagg
                                                                    2580
ttttgatggg ctaaatgtcc ttgtaaactg tacaatagct tcacacaatc cgacatttct
                                                                    2640
aatcttctca ttcttttcta cctcatttgg atgataaaat aaaatcttat tttcctcctg
                                                                    2700
tccttcgcgc ggcccgaagc gcgggttgta gatgaagaaa ctcagcagcg ccggcgggaa
                                                                    2760
ctgcttctcc tgggccgccc agggcccgct cccggccccg gccgccgctg cagccat
                                                                    2817
```

```
<210> 3291
<211> 446
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(274)

<223> similar to gi558846 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3291
aagttaaaat gatattagga aaaagctcag attagatata aaattgatca tgtctgccag
                                                                       60
aaaatattet eetaaaagea atttetetet aaacaceeaa agegeaeage taeteteage
                                                                      120
aagagaaaca tgagcattat gaagaaaggt ggcagatttt cagaagaatt tttataaagt
                                                                      180
ttctttccca tctctgctgt tctgtcatct cctagccatt gaatggaggt tctatattga
                                                                      240
aatacatctg acaacttcca acaacattt ttgatgaaga aatagaatct gactatgttc
                                                                      300
atatagtgga atatattaga acttgcaaca tagccaaact gaagagctat tatggttttt
                                                                      360
gggtggccac atcacatgtc tttatttgtc ctgtaatagc agcattccaa tttagtgaaa
                                                                      420
taaaagatac taaaattgtg tttact
                                                                      446
```

```
<211> 1101
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (16)...(640)
<223> similar to gi5832782 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3292
tacctggatc gggtgaaggt actggtgttg ggagactcag gtgttgggaa atcttcgtta
                                                                       60
gtccatctcc tatgccaaaa tcaagtgctg ggaaatccat catggactgt gggctgctca
                                                                      120
gtggatgtca gagttcatga ttacaaagaa ggaaccccag aagagaagac ctactacata
                                                                      180
gaattatggg atgttggagg ctctgtgggc agtgccagca gcgtgaaaag cacaagagca
                                                                      240
gtattctaca actccgtaaa tggtattatt ttcqtacacq acttaacaaa taaqaagtcc
                                                                      300
tcccaaaact tgcgtcgttg gtcattggaa gctctcaaca gggatttggt gccaactgga
                                                                      360
gtcttggtga caaatgggga ttatgatcaa gaacagtttg ctgataacca aataccactg
                                                                      420
ttggtaatag ggactaaact ggaccagatt catgaaacaa aqcqccatqa aqttttaact
                                                                      480
aggactgctt tcctggctga ggatttcaat ccagaagaaa ttaatttgga ctgcacaaat
                                                                      540
ccacggtact tagctgcagg ttcttccaat gctgtcaagc tcagtaggtt ttttgataag
                                                                      600
gtcatagaga agagatactt tttaagagaa ggtaatcaga ttccaggctt tcctgatcgg
                                                                      660
aaaagatttg gggcaggaac attaaagagc cttcattatg actgaattac actcatcctt
                                                                      720
tggaagagtg agcaagcagt ggcagttttt cacagctcat cttgctgtgt tcaattatta
                                                                      780
ccatcacage cttttaacaa aatcatetta aaatgetace etteageett accetttaat
                                                                      840
ggaaaaatga aaggaagtga caatacggga ggtccaaact ttgtccctgt tctctgtgtt
                                                                      900
ccttaccttt ctgtccctgt gtatagatta tgtaaaagcc ttgtgtaaat atgagatgtt
                                                                      960
gtcaaaatga tgcagtaaat gagcaatgac agtgtactgc agagaaaatt tactcttgcc
                                                                     1020
tagaactgga gggtttttat gggtctgtaa ttttcccaca ctcattgctg aaagcttaat
                                                                     1080
taagtacttc aaaaacgtaa a
                                                                     1101
```

<210> 3292

<210> 3293 <211> 364 <212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(239)
     <223> similar to gi804809 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3293
aggaactaga taggctgaac agaccaataa caagtaatga gattgaatca gtcataaaaa
                                                                       60
gtcttccaaa aaagaaaagt ccacgaccaa agggcttcac tgctgaattc tactgaaact
                                                                      120
ttaaaaatgt aataccaact tttttcaaac tattccccaa aaaaacgaaa cagaaggaat
                                                                      180
tettecaact egitttacaa gggetttate tigaaggeaa aatggeacea eteaaatgte
                                                                      240
catactcaaa tatgccgcat tttggatttt ccctgggctg tcacctccta tcctggcttc
                                                                      300
aaaactgtgt atagtgagca catctccgcg ggtctcccca ccctgtgggt aacacttgac
                                                                      360
gata
                                                                      364
     <210> 3294
     <211> 1695
     <212> DNA
    <213> Homo sapiens
    <220>
     <221> misc feature
    <222> (389)...(1361)
     <223> similar to gi3874826 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3294
tggaattcct gggtcgacga tttcgtgaaa gagtcattaa cagttaggag ttgatggcag
                                                                       60
tttcaataac aggtcattgc cgagaaaagg atagcactat aatatgcaga aatctacaaa
                                                                      120
ttctgatact tccgtggaaa cactgaattc tacccgccaa ggcacaggag ctgtgcaaat
                                                                      180
gagaatcaaa aatgccaaca gccaccatga caggctcagc caaagtaaat ccatgatcct
                                                                      240
caccgatgtc gggaaggtca ctgaacctat atccagacac agaaggaatc attcacagca
                                                                      300
tatcttgaaa gatgtcattc ctccattgga acaactgatg gttgaaaaag aaggttatct
                                                                      360
gcaaaaagct aaaattgcag atggaggaaa gaaactaagg aaaaactggt ctacttcctg
                                                                      420
gattgttett tetagtegaa gaattgaatt ttacaaagaa tecaageaac aggetetgte
                                                                      480
caatatgaaa actgggcaca aaccagaaag tgtggatttg tgtggagcac acattgaatg
                                                                      540
ggccaaggaa aaatcgagca gaaagaatgt ctttcagatc acaacagtat caggaaatga
                                                                      600
gttccttcta cagtcagata ttgacttcat catattggat tggttccacg ctatcaaaaa
                                                                      660
tgcaattgac agattgccaa agggttccaa gttgtccatt caaggaaacc tgggatttat
                                                                      720
ttcaaattcc aaaggttcct ctagcactga attgctaagt cactaccgac agtgatataa
                                                                      780
aagaaccaga aaccatgagc accagaaaat ctttaatgtt cagactgcat cacagtgctt
                                                                      840
ccgatacaag cgacaaaaat cgagttaaaa gcagattaaa gaagtttatt acccgaagac
                                                                      900
cttccctgaa aactctgcaa gaaaaaggac ttattaaaga tcaaattttt ggctctcatc
                                                                      960
tgcacaaagt gtgtgaacgt gaaaattcca cagttccgtg gtttgtaaag caatgcattg
                                                                     1020
aagctgttga gaaaagaggt ctagatgttg atggaatata tcgagttagt ggcaatctgg
                                                                     1080
```

```
caacaataca gaagttaaga tttattgtca accaagaaga gaagctgaat ttggacgaca
                                                                     1140
gccagtggga ggacatccac gttgtcaccg gagcactgaa gatgttttcc gggagctgcc
                                                                     1200
tgagccgctc ttcccttaca gtttctttga gcagtttgtg gaagcgatca aaaagcaaga
                                                                     1260
caacaacaca agaattgaag ctgtaaaatc tcttgtacaa aaactccctc cgccaaatcg
                                                                     1320
tgacaccatg aaagtcctct ttggacatct aactaagtaa gttgtaagga tttctggatg
                                                                     1380
tgtcatttta tagtcatttc ctaaatgggc aatattgaat ttcacatctc taaggcaaga
                                                                     1440
gtttccaaat gcgtacatct cgtattttcc cttgtagctg aactaggtct ttctgcagaa
                                                                     1500
gctggagaat gtgttaggga taggaaggac aatctacaaa aggaacttct gaaataactt
                                                                     1560
atttttcaag gccctttcaa ctagtatatg tttgctgatt gcttgtcaga accatcgcct
                                                                     1620
ggaccctggg atgggtcatc ttgactttgt tatctaacat aatgaaagaa catgaaatga
                                                                     1680
ttcagacatg gattc
                                                                     1695
```

```
<210> 3295
     <211> 2125
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1) ... (2126)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (2126)...(133)
     <223> similar to gi2832906 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3295
ttttttttt ttggtggttg tctctaatat ttatttgtct ggttataaaa ttaatatgtg
                                                                       60
aggagcattg gatttggtga gaacgttttg aaccctagct gtcatgtgcc acctgcggga
                                                                      120
tctagaccag tgacttctca gaactgccat ttcctcatct ggtagacagg atggtaagcc
                                                                      180
ctgtcttgct cactccacgt atggcagtgc agatgaaatg agatcacaga ggggaagcaa
                                                                      240
ttggcaggct ggaaagtgct gacaaatgga aggggttgtg tcaccaccct cagctgaggt
                                                                      300
agtaccaagg tecaagetee tgeeceteee ceteeceage ecetaaatae acacacgaat
                                                                      360
ggagggccac ttgcagcctt ggtctgatgg aattgggggc aaggccacac atcttcctca
                                                                      420
agcttggcca gatggggcct cactggggcc cttccagaat cgggcatcgg ctgtggccag
                                                                      480
ctgtgtgagg atctcctcca actcgggtcc atcctctggg aaacgctcag agaaggatcg
                                                                      540
gatgaggcca gcagctgacg cctcgtattc cagaagctgc acgtctgagc cttcaaggcg
                                                                      600
agtgttgggc tgaacaatga gcttccgaga ttccttacgc agcagcaccg tgtccctgag
                                                                      660
ggtgaggaag cactcggggg gcgcatcagt gactgttgca tacccctcgt acagggcccg
                                                                      720
eceteeggee acateceetg tggaetteag cacetgaagt eteegeagga agegetetag
                                                                      780
agcaggettg cccacagace ggatettget geggtegagg eggaceeggg catetgggeg
                                                                      840
cccatcggag cctgtggtgg gagtgatggt aacgagtccc tcgccagcct ccagcaagac
                                                                      900
tctcaggatc acaaaccggg cctgcatatg ggcctgtcgc cagttgaagg cctcaggtgt
                                                                      960
```

1020

1080

1140

1200

1260

gtagaactee agagegagea geeeggeeeg aaceatgttg ageeagttea egtagateae

gtcctccgca tcagccccct caaagccaaa gatctccagc acttgcgggt ggagacagag

gtagagaccc acgctctcag cccggcactc ttcgtagctg gaggcgatgg tgctgaactt

gctatcccag gtctccccgc tccgatacca gctctgaatc tgctcgcccg tctctgggtt

gatcactgtt teetggteaa agttgaatge teettttteg teetgtaega agagettgee

<210> 3296 <211> 679

<212> DNA

<210> 3297 <211> 2228 <212> DNA

<213> Homo sapiens

<220>

<213> Homo sapiens

<221> misc feature

```
actgccatgg cccagcaget cgtgcaggec cacctgcaca tcgaaggagg geceetteca
                                                                     1320
gaggatgtac aggtccttgt catcctcctc cagaaaggta agcttctccc gctgcgtggc
                                                                     1380
gtaggccaca gccagcacat tccccagcga cacgttctta aagccttccg tctgcctcag
                                                                     1440
atcatcgtag ttggggatgt tgatgccggc agggatgccg gagccagcga aggtgagaac
                                                                     1500
atccagggag gtgaagtcag gggtgaggaa cttgtccttc tcaaaggttg ggggccaggg
                                                                     1560
cageteette ageagetget etgegetege caccageege teaaacttgg cacteatgge
                                                                     1620
cttqttcacc acagctacga aaccttcaaa ttctcctcgg gaaccaaagg ggtcgcggta
                                                                     1680
gctctcgatg aacccgatgt aactctccac gatggggcct ttgtcctgga tccagaagcg
                                                                     1740
qqaqcccctc ttgtgggcct cgatggagcc ctgggtgaag ctctctatat actgggccag
                                                                     1800
catctgcccc tggtggctgt tggctgcata ggccttggct ttctccagct gctccaccac
                                                                     1860
cttctggagg atgggcgcgt agtccccccg ggtcacctgg aaagggcttc cccqqaattc
                                                                     1920
atagctcttc agcttggaag tcacctcaga gtccagggaa ggctctgagc caagcacaga
                                                                     1980
agccagccgc acctcgtagt agggcttccc ttctccatcg acctctttaa gagccgggtg
                                                                     2040
ttgtaggcac tgaggttctg tgagtccaga aagtcctggn caatttggca tcttccatgg
                                                                     2100
tacaattccc agagaaatag gtggt
                                                                     2125
```

```
<222> (641)...(345)
    <223> similar to gi1872200 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3296
ccagacatca tcctagcact taaggagctg gaagcagagg tatcatttaa actacttcct
                                                                       60
ctgcttccag acatcatcct agcacttaag gagctggaag gttgaacaga aattcttctt
                                                                      120
ggaatccttg aaggtttaga ctccattctt aaagattgga ttctgaatat caggtaacat
                                                                      180
ttttatttgg aatatatgta tacagcettt ttcaaaatce etagggeeae tettttgggg
                                                                      240
gtatttaaaa aatgtgttag ctggatctga ggcatcctgt aatcaaaacc aatatatatg
                                                                      300
tagcaaaatg aataacattt ttcaaacttt ttggacttca gaattatgga taacagattg
                                                                      360
taacctcata taaaatcata cttttgcgct ggggaacggt cgtcacgcct gtaatcccag
                                                                      420
cactttggca ggctgagact ggcagatcat ttgaggtcag gagttcgaga ccagcctggc
                                                                      480
caacatgacg aaaccccgtc tcgactaaaa atacaaaaaa attagctgga catggtggca
                                                                      540
cccatctcta ctcccagcta cttgggaggc cgaagaggga ggattgcttg aacccaggag
                                                                      600
gtggaggttg cagtgagctg agatcatgag actgcactcc agcctgggtg acagagtcga
                                                                      660
gactccatct caaaaaaaa
                                                                      679
```

```
<220>
<221> misc_feature
<222> (72)...(956)
<223> similar to gi3386611 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3297
ggtttgcttc ctttcccagc atcaatctcc agcaaatgct aaaagaagtc cccaaaaggt
                                                                     60
ttggggatga gagaggtgcc attgttcatt acacgattct caataaccat gtttaccqga
                                                                    120
gatctttagg gaaatacaca gacttcaaga tgttctctga tgagattttg ttatcattga
                                                                    180
caagaaaggt ccttctccca gatttagaat tttatgttaa tcttggagat tggcccttgg
                                                                    240
agcatcgaaa agtcaatgga acccctagcc ccatacctat catttcatgg tgtggctctc
                                                                    300
tggattcaag agatgttgtc cttccaacgt atgacatcac ccactccatg cttgaagcca
                                                                    360
tgcggggtgt tacaaatgat ctcctctcta ttcagggaaa tacagggcct tcctggatca
                                                                    420
480
tacagctgtc caaagaaaat cctcagctac tagatgcagg aattacagga tatttctttt
                                                                    540
tccaagagaa agaaaaggag cttggaaaag ccaagttgat gggtttactt gatacttgta
                                                                    600
cttaaagaaa tgtggatggg accgtggctg cttacagata tccatatctc atgctgggcg
                                                                    660
acagtctggt tttaaagcag gactcgccat attatgaaca tttctacatg gcactagaac
                                                                    720
cttggaagca ttatgttcca attaaaagaa atctgagtga tttattagag aaagttaaat
                                                                    780
gggctaagga aaatgatgaa gaagccaaga agattgcaaa agaaggacag ttgatggcta
                                                                    840
gggacctact acagccacac aggctttact gctactatta ccaagtactg cagaaatatg
                                                                    900
ccgagcgcca gtccagcaaa cccgaagtac gtgatggaat ggaacttgtt cctcagccag
                                                                    960
aagatagcac agccatctgc cagtgccaca ggaaaaagcc ttcaagagaa gaactttgag
                                                                   1020
tcagcccaga atcacactcc tgtgtatccc ggctacactt taaggaaaga ttgaatctaa
                                                                   1080
gctgtgaagg acagtataga agactgcacc aagtggacta gttctcccgg tggctttata
                                                                   1140
tatgtagatg gatatagcag tactggttga gtatccctca tctgaaatgc ttaggaccag
                                                                   1200
gagtgtttca ggcttcagat tttttaagat ttgggaatat ttgcatgtac ataatgaggt
                                                                   1260
atcttgggga tgagatccaa gtctaaacac aaaattcatt tatattttat atataccttg
                                                                   1320
ttcacatacc ctgaaggtaa ttttatataa tatttttaat aatttgtgca tgaaacaaag
                                                                   1380
tttgtataca ttgaactgtc agaaagcaaa ggtgtcacta tcttagcgac ccaagtggtg
                                                                   1440
gtgtcagcac tcaaaaagtt ttggattttg gggtatttca gattttagat ttttgtatga
                                                                   1500
ggaatgttca acctgtattt gaacgaagca ttaccaaata tcgattgaat attaatatct
                                                                   1560
tttgcgtaaa aactgctatt atcagcatca tagtttctct aaaaagaaaa cttggggatc
                                                                   1620
atagccgata gagagacttg ctaaaatata aatcagcctc tgcaaaactg tttacatatt
                                                                   1680
tattggttta catattttat tggtttattt ctatcccctg ttcacttttt ctcttccact
                                                                   1740
tccaattatg aagagaaaat atttgttcag ggttgtcccc ccgccccccg tcactgcata
                                                                   1800
atttctcctc ttacaagctg cttttggctt tcattaataa cagcttcctt ttagaaggtc
                                                                   1860
tgataaggat atttaaggaa gaagagaatg actctgttat taaaggtggc atggagactg
                                                                   1920
tggagggaat atttttaaa gcactactca tatcctttaa actaaatttt gccaaagccc
                                                                   1980
gagacaacat taaggagaaa ttgtacctta agttagtaat tccaaatcta tctgagttgt
                                                                   2040
atacccatca aagacaatac agttattaac atagatgaag gtatgctata ggcatcattc
                                                                   2100
attatctcta tattgaatag gtgaaagata actgtagtca ggtgaaaggc attcattatt
                                                                   2160
tttaagctga aaaggggatc cttgaaaaca ctgaaaacct ctacaacaat cttcaggaag
                                                                   2220
cctgcttg
                                                                   2228
```

```
<210> 3298
```

<211> 2017

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (107)...(296)
<223> similar to gi2198815 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3298 tttcgtgcgg gagatcagag gtcccgccgt cccgcgcctg acctcggctg aggacaggca 60 ccgccatggg ccacacgcac acagcccgga gttgcagcgg accggcagag attacagcct 120 ggactacetg ecetteegee tatgggtggg catetgggtg getacettti geetggtget 180 ggtggccaca gaggccagtg tgctggtgcg ctacttcacc cgcttcactg aggaaggttt 240 ctgtgccctc atcagcctca tcttcatcta cgatgctgtg ggcaaaatqc tgaacttgac 300 ccatacctat cctatccaga agcctgggtc ctctgcctac gggtgcctct gccaataccc 360 aggcccagga ggaaatgagt ctcaatggat aaggacaagg ccaaaagaca gagacgacat 420 cgtaagcatg gacttaggcc tgatcaatgc atccttgctg ccgccacctg agtgcacccg 480 gcagggaggc caccetegtg gccetggetg teatacagte ecagacattg cettetete 540 ccttctcctc ttccttactt ctttcttctt tgctatggcc ctcaagtgtg taaagaccag 600 ccgcttcttc ccctctgtgg tgcgcaaagg gctcagcgac ttctcctcag tcctggccat 660 cctgctcggc tgtggccttg atgctttcct gggcctagcc acaccaaagc tcatggtacc 720 cagagagttc aagcccacac tccctgggcg tggctggctg gtgtcacctt ttggagccaa 780 cccctggtgg tggagtgtgg cagctgccct gcctgccctg ctgctgtcta tcctcatctt 840 catggaccaa cagatcacag cagtcatcct caaccgcatg gaatacagac tgcagaaggg 900 agctggcttc cacctggacc tcttctgtgt ggctgtgctg atgctactca catcagcgct 960 tggactgcct tggtatgtct cagccactgt catctccctg gctcacatgg acagtcttcg 1020 gagagagagc agagcctgtg cccccgggga gcgccccaac ttcctgggta tcagggaaca 1080 gaggctgaca ggcctggtgg tgttcatcct tacaggagcc tccatcttcc tggcacctgt 1140 gctcaagttc attccaatgc ctgtgctcta tggcatcttc ctgtatatgg qqqtqqcaqc 1200 gctcagcagc attcagttca ctaatagggt gaagctgttg cttgatgcca gcaaaacacc 1260 agccagacct gctactcttg cggcatgtgc ctctgaccag ggtccacctc ttcacagcca 1320 tcagctttgc cctgtctggg gctgctttgg gataatcaag tctacccctg cagccatcat 1380 cttccccctc atgttgctgg gccttgtggg ggtccgaaag gccctggaga gggttttttc 1440 accacaggaa ctcctctggc tggatgagct gatgccagag gaggagagaa gcatccctga 1500 gaaggggctg gagccagaac actcattcag tggaagtgac agtgaagatt cagagctgat 1560 gtatcagcca aaggctccag aaatcaacat ttctgtgaat tagctggagt aggagtctgg 1620 gagtggagac cccaggaaac agcatgaggt gcttactcag gaagtcagga catttttggc 1680 ctttggctta acttccagat gctcagtcgg cttggggaag gactgaaggg cagctgccaa 1740 gacctcagtt acctcctgac ctgagggtgg agagtggcag gaagcaagca tgtttgctgt 1800 gcacttagga aaggctggtg agccagaggg actgatcagg ccccattcac tctctactca 1860 ttaaaaaggtc ctgagccacg aagcgcttcc cattttgaac tttctgtcct cacagattct 1920 gtttgacaga atctaagggc catcagggaa ctcttttcat cttgcaaaga gaaaaagcca 1980 gtctttccag aataaatatt catctgtttg aaataaa 2017

```
<210> 3299
<211> 1056
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

tatacccaca

```
<222> (1046)...(9)
     <223> similar to gi5917666 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3299
tttcgtgttc tgggaacgca gcagtgaccg gcctgtccgg tggttccctg ccaggtgcgg
                                                                       60
ggtgtgagga gacagatgca tggataagtc tccgtgggaa actcaggcct ttgtcctggc
                                                                      120
ggaggggaat gggtetgagg cageetetge egggetggeg geetgtetgg etgegegtee
                                                                      180
tgcagcaccg gcctcacccc cagcacacgc ccgccaggag cgcaggggcc ccgaggatgg
                                                                      240
aagcgtctgt ctgaggcgct gtcctgggac cccaccccgc cttcggggct gatgcacaga
                                                                      300
ccgggaattg aggatacctg gtgtggagga ggccgctgtg tttggggcctg ggtctgaagg
                                                                      360
gtgagtgggt gtcattgtgg ccacgggccg gggtcggggg agcattcagg tggccggagg
                                                                      420
aggcctggca cagggaaggg cagtgagggg cccgggtggg gccaggagat agaggggcgg
                                                                      480
gaccaggcct gtgggacagt ttgaatcacg cggggagttt ggtctttatg ggaagaaagg
                                                                      540
cgccgtggcc attcggagag ccactctggc actgctgccg gtgcggtccg gggctgcggg
                                                                      600
gcctcctcct gggcctgaac tgcagggctg gtgggggcca tgggggaagg tggctccaca
                                                                      660
ggtccccgga gctgggggag caggaggatg gggttgacca ggagggaaag ctatggagct
                                                                      720
qqaqaatqca ggaggccccc gaggggaggt gcagccagcg ctggtgggga ggcctctgag
                                                                      780
gggtacgcgg taattgacat cacgggtgtg ggtgagagtg gctttcaaag catcggctgg
                                                                      840
agcagggtcc ccattaaagc cagagacgct gacgccatgg ggctggggtt ggggctgggc
                                                                      900
cggggctttg ggaggtccga actccccagc agggagccag ggctctgggc cagttcccag
                                                                      960
gcccagttaa tcttcagtag aatcgatcga ccttggctca gagggttgga ggcagggatg
                                                                     1020
ggcaaagggt gaggggtgag gcgcacgaat ggcgaa
                                                                     1056
    <210> 3300
     <211> 430
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
     <222> (36)...(283)
    <223> similar to gi1619929 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3300
cataattcgg cacgagggaa accagggagc ccccctactt cagtgtagag tcagcaaaac
                                                                       60
ctgtgcagga cttctatgcc aaaattataa agcactgacg aaagaaagtg aaagggatct
                                                                      120
aagtaaataa ggagacatac catgttcatt aattttaaga ctcaacatag caaagtcgtc
```

aattetteee aaatggatgt gggtttaatg caatteetat caaaatetea geaatagtgt

ttctagataa agacaaaatt attctaacat ttacatggaa aagcaagtga actagaatag

ctcaaacaat tctggatgaa aagaacaaac tagtaggaat caatttcaat atagctacgt

aatcaagacc ctgtggtatt gctgaagaaa cagacacata gatcaatgga actaacacaa

180

240

300

360

420

430

```
<210> 3301
<211> 2248
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1973)...(1345)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3301 gcggtattcg gcacgagctt ccctcctcc cttctctcgt ctcctcccca ctgcgcctcc 60 ctccctcctg gccttccttc ccttacccga ctttgcagat ttctcttccc ccaggcctcc 120 ctcctccacc tctccgcccc ctccgggctt ggctctccca ggaggctacg actggagcca 180 ctggtcccgc aggatccccg cgtcctcggt cgccgcgtcc acgtccctct cgcgtccccg 240 cccggcgcca cgccgcctcc tctgggttcg gcctccgcgc ggtgcagcgc agtctcaggc 300 cgcgggacaa gcccgactta aatctctgca atggctaacg aagcttatcc ttgtccgtgt 360 gacattggcc acagacttga gtatggaggg ctaggccgtg aagttcaagt cgagcacatc 420 aaggettatg teaceaaate eeegttgat geaggeaaag etgtgattgt eatteaagat 480 atatttggct ggcagttgcc caataccaga tatatagctg acatgatctc aggaaatgga 540 tacacaacca ttgttccaga cttctttgta gggcaagagc cttgggaccc ctctggcgac 600 tggtctatct tccctgagtg gctgaaaaca agaaatgccc agaagatcga tagagagatc 660 agtgctatct tgaagtatct gaaacaacag tgtcatgccc agaaaattgg catcgtggga 720 ttctgctggg gtggaactgc tgtccatcat ttgatgatga aatactcaga attcagggca 780 ggggtgtccg tctatggcat cgtcaaggat tctgaagaca tttacaattt aaagaacccc 840 actitgtica tittigciga aaatgatgti gigatticac tcaaggacgi atcittgcig 900 actcagaagt tgaaagaaca ctgcaaagtt gaatatcaaa ttaaaacatt ttctgggcag 960 actcatgggt tcgtgcatcg gaagagagaa gattgctcac ctgcagacaa gccctacatt 1020 gacgaggcca gaaggaattt aattgagtgg ctgaacaagt acatgtagca agaatcaagg 1080 gcaagccttc ctagaatagc tttcatccca aaatttgctt ggaaatagtt agatcatttg 1140 atttaatttt cacttttata aaataagtgt aggaatccta aaattgatta tttcatttga 1200 aacacaaatt cagtaggacg taatgcatga aataatttaa tttttgacat gtacatcgaa 1260 tcataattta aaaacaaggt ctgaccaggt gtagtgcctc atgcctgtaa ttccagcact 1320 ttgggaggcc aaagtgggtg gatcacctga ggtcaggagt ttgagaccag cctggccaac 1380 atggtgagac cccatctcta caaaaaatac aaaaattagc ctggtgtggt ggtgcacgcc 1440 tgtagtccca gctacttggg aggctgaggc acaagaatca atagaaccca ggaggtggag 1500 actgcagtga gccaagattg tgccactact gtactctagc ctgggcagca gagtgagacc 1560 ctgtctcaaa aataaataag taaataaata aataaataaa ataaaaacca ggtcagtacc 1620 tggagaattt gaatgataga gaatgataga gtaataccct aattattagt taaaacctac 1680 aggccgggtg cggtggctca cgcctgtaat cccagcactt tgggaggccg aggtgggtgg 1740 atcacttgag gtcaggagtt caagaccagc ctggccaaca tggtgaaacc ccatctctac 1800 taaaaaatata aaaatcagcc gggcatggtg gcatgtgcct gtaatcccag ctactcagga 1860 gtctgaggag gagaatcact tgaacctgga ggcagaggtt gcagtgagtc gaggttgcgc 1920 tactgcactc cagcctggac aacagaggga gactctgtct ccaaaaaaaa aaaaacctac 1980 agctgttcaa ggaccagctg acaggtcaag tgtggccttt tctggtcttt gaacacatca 2040 tagaaagtga caaatgctgc aaagccatga agaacatgaa ctataaacgg gtagactaac 2100 tgcccagctt agacacttat ctatgccaca aaacagctga atttgtcaca tttatatatt 2160 gcaatatggg aagtattgag atcaaaacag gattccattg acctaattat attaagctaa 2220 taaactaatt ttttgaattt ttgaaaaa 2248

```
<210> 3302
<211> 2352
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(1238)
<223> similar to gi36603 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 3302 cggctccggg agctctgtca acagtggcta cagcccgaga cccataccaa ggagcagatc 60 ctggagctgc tggtgctgga gcagtttctg atcatcctgc ctaaggagct ccaggcccgg 120 gtgcaggagc atcacccaga gagcagggag gacgtggttg ttgttctgga ggatttgcag 180 ctggatcttg gagaaacagg acaacaggtg gacccagacc agccaaagaa acaaaaaata 240 cttgtggagg agatggcccc tctgaaagga gtacaggaac agcaggttcg gcatgagtgt 300 gaagttacaa agcctgagaa agagaagggt gaggagacaa ggattgagaa tgggaagctt 360 attgtagtaa cagactcttg tggaagagta gagtcatctg ggaaaatatc tgaacccatg 420 gaggeteata atgagggete taaettggaa aggeateagg eeaageeeaa agagaagatt 480 gagtataaat gctcagaacg tgagcagaga ttcatccagc acttggacct gattgaacat 540 gcgagtacac acacgggaaa gaaactctgc gagtctgatg tgtgtcagag ttccagtctt 600 acaggacata agaaagtcct ctcttaggag agaaaggtca tccagtgttc atggagtttt 660 ggggaaagcc tttcagagga gttcacacct cgtcagacat cagaaaatcc atcttggtga 720 gaagccttat cagtgcaatg agtgtggcaa agtctttagc cagaatgcag gccttttgga 780 acatctcaga attcatactg gagagaaacc ttatctatgt atccattgtg gaaaaaattt 840 taggcgcagc tctcacctta atcgacatca gagaattcac agtcaggagg agccctgtga 900 gtgcaaggag tgtggaaaaa cctttagtca ggccttactc ctcacccacc atcagagaat 960 ccatagtcac tccaaaagcc atcaatgtaa cgagtgtgga aaagctttca qtttqacctc 1020 agaccttatt cgacaccaca gaattcatac tggagaaaaa cctttcaagt gtaacatatg 1080 ccagaaagcc ttccgactaa actcacacct tgctcagcat gtaagaatcc acaatgaaga 1140 aaaaccctat cagtgtagtg aatgtggaga agccttcagg caaaggtcag gtctttttca 1200 acatcagaga tatcaccaca aagacaaact ggcttgatga ggtgttctct ccttgtagaa 1260 catcagagaa ggcacattga ctagcaaaca gcactttagg aaaagtcacc gtagcccact 1320 gtggcatcag aaaattettg ggggetgagt tggaggetee etgeetetat teteteteet 1380 ttgctttcct tgaagtcagc tttggaccac aataatttca ctgtagatga tatgctagga 1440 tcaaagttaa acagcattct tcactgcagg acatctcaga gcatgtaaca taactgcatg 1500 attatatact ctaagcaata gagagcttca tgactgagta agagttttga agtcagcagt 1560 gaatcaagtg cccacagatt tgcaggctta agcagaacaa gggaagattg atatttttgg 1620 atatgctata gcagctttct cctatgaaat aaaactgatg atgtttggaa gtatactact 1680 ctcaaaggtg tctttaaagt acaggttaat ggtgaacatt ttcccccagt ggcttcacct 1740 catteeteee aetggeetta eccetteett eeccagtgga ageattttea aaageaaaga 1800 taattttcgc tggtgaactt cagaacttgc cttcagggtt agcttcatgt aattttacca 1860 tttcccatcc ccattcccca ccacattatg tcaagattca agttataaat taacgtttta 1920 cttagacttt gaaagagatt tcatgagtaa tttgaatgaa ccttgctgaa ttaatctgaa 1980 tagcaactgt ctgacttgat aactccagtg ccagtatagt ggctgctgca tagacactat 2040 tcagtaaatg tctgatgaaa gaaattggac tttttccctt taatactgat gatqcaattt 2100 tgaaatgttg cttgttctgg aatacttcgg aagttaaaca ataaagtcag cttggagagg 2160 agatcatgat ctttatactg tgaatagcag aatgtcacag atgaagaata ttaaaattag 2220 gggcgtccac tccaaaacat atcaccagag tgacaacttc agccctcagc ctctgcaatc 2280 catatatatc ctggtcttgg gagtccatag aatactgttt ccttctaata aaggtttcaa

2340

2160

```
<210> 3303
<211> 2900
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(2637)
<223> similar to gi4028015 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 3303 atggggctca aggcgcgcag ggcggcgggg gcggctggcg gcggcggcga cgggggggcggc 60 ggaggcggcg gggcggctaa cccagccgga ggggacgcgg cggcggccgg cgacgaggag 120 cggaaagtgg ggctggcgcc cggcgacgtg gagcaagtca ccttggcgct cggggccgga 180 gccgacaaag acgggaccct gctgctggag ggcggcggcc gcgacqaqqq qcaqcqqaqq 240 accccgcagg gcatcgggct cctggccaag accccgctga gccgcccagt caagagaaac 300 aacgccaagt accggcgcat ccaaactttg atctacgacg ccctggagag accgcggggc 360 tgggcgctgc tttaccacag cgttggtgtt cctgattgtc ctaggggtgc ttgattctgg 420 ctgtcctgga ccacattcaa ggagtatgag actgtctcgg gagactggct tctgttactg 480 gagacatttg ctattttcat ctttggagcc gagtttgctt tgaggatctg qqctqctqqa 540 tgttgctgcc gatacaaagg ctggcggggc cgactgaagt ttgccaggaa gcccctgtgc 600 atgttggaca tetttgtget gattgeetet gtgeeagtgg ttgetgtggg aaaccaagge 660 aatgttctgg ccacctccct gcgaagcctg cgcttcctgc agatcctgcg catgctgcgg 720 gatggaccgg gagaaggtgg cacctggaag cttctggggc tcagccatct gtgcccacag 780 caaagaactc atcacggcct ggtacatcgg tttcctgaca ctcatccttt cttcatttct 840 tgtctacctg gttgagaaag acgtcccaga ggtggatgca caaggagagg agatgaaaga 900 ggagtttgag acctatgcag atgccctgtg gtggggcctg atcacactgg ccaccattgg 960 ctatggagac aagacaccca aaacgtggga aggccgtctg attgccgcca ccttttcctt 1020 aattggcgtc tccttttttg cccttccagc gggcatcctg gggtccgggc tggccctcaa 1080 ggtgcaggag caacaccgtc agaagcactt tgagaaaagg aggaagccag ctgctgagct 1140 cattcaggct gcctggaggt attatgctac caaccccaac aggattgacc tggtggcgac 1200 atggagattt tatgaatcag tcgtctcttt tcctttcttc aggaaagaac agctggaggc 1260 agcatccage caaaagetgg gtetettgga tegggttege etttetaate etegtggtag 1320 caatactaaa ggaaagctat ttacccctct gaatgtagat gccatagaag aaagtccttc 1380 taaagaacca aagcctgttg gcttaaacaa taaagagcgt ttccgcacgg ccttccgcat 1440 gaaageetae getttetgge agagttetga agatgeeggg acaggtgaee ceatggegga 1500 agacaggggc tatgggaatg acttccccat cgaagacatg atccccaccc tgaaggccgc 1560 catccgagcc gtcagaattc tacaattccg tctctataaa aaaaaattca aggagacttt 1620 gaggccttac gatgtgaagg atgtgattga gcagtattct gccgggcatc tcgacatgct 1680 ttccaggata aagtaccttc agacgagaat agatatgatt ttcacccctg gacctccctc 1740 cacgccaaaa cacaagaagt ctcagaaagg gtcagcattc accttcccat cccagcaatc 1800 tcccaggaat gaaccatatg taggccagac catccacatt cagaaattcg aagaccaaag 1860 gcattgatgg gggaagtttg ttaaaagttt gaaaggacag gtttcaggga ctggggagga 1920 agetggaett eetegtggat atgeacatge aacacatgga aeggttgeag gtgeaggtea 1980 cggagtatta cccaaccaag ggcacctcct cgccagctga agcagagaag aaggaggaca 2040 acaggtattc cgatttgaaa accatcatct gcaactattc tgagacaggc cccccggaac 2100 caccctacag cttccaccag gtgaccattg acaaagtcag cccctatggg ttttttgcac

<210> 3304

```
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                                                                     2280
actecegagt gagetgeeac teceaggetg acetgeaggg eccetacteg gacegaatet
                                                                     2340
ccccccggca gagacgtagc atcacgcgag acagtgacac acctctgtcc ctgatgtcgg
                                                                     2400
tcaaccacga ggagctggag aggtctccaa gtggcttcag catctcccag gacagagatg
                                                                    2460
attatgtgtt cggccccaat ggggggtcga gctggatgag ggagaagcgg tacctcgccg
                                                                    2520
agggtgagac ggacacagac acggacccct tcacgcccag cggctccatg ccctctgtcg
                                                                    2580
tccacagggg atgggatttc tgattcagta tggacccctt ccaataaqcc catttaaaaq
                                                                    2640
aggtcactgg ctgacccctc cttgtaatgt agacagactt tgtatagttc acttactctt
                                                                    2700
acacccgacg cttaccagcg gggacaccaa tggctgcatc aaatgcatgc gtgtgcgtgg
                                                                    2760
tggccccacc caggcagggg cttcccacag cctcttcctc cccatgtcac cacaacaaag
                                                                    2820
tgcttccttt tcagcatggt ttgcatgact ttacactata taaatggttc ccgctaatct
                                                                    2880
cttctaggat aaaaaaaaa
                                                                    2900
```

```
<211> 1911
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1881)...(1582)
     <223> similar to gill77607 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3304
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                                                                       60
eccgetggae tetgeggetg gecaaaaggg gagggggage cecqeqteet qqqqqeecet
                                                                      120
agcggaaggg gcgggggttg cgctgggcat cctgtctggg gcatctgtct gggactctgt
                                                                      180
tggtgcctct cacctggcga ggggcctgtg gtgggggtag gggggaagtc cctggcgcca
                                                                      240
tgcttggcca agccctgctc tgctgggctg cgggctggcg gcgctcaccc agctcctcac
                                                                      300
ctgtcccgca tcttcctgtt tttcttccct ttctggttgg gcagcgagag ttgagaggag
                                                                      360
gcagatgget tecateceag aaategetet eetettteea teeetaeaga gagggacaga
                                                                      420
gaggcaaagt teettgeate eeeeggggea etgteeetgt gageteeegg tgteetgeae
                                                                      480
atgtgagccc ctgagtcacc gggcctgtga gtgtgggatg gggctccgtg gccagcctgg
                                                                      540
cctcctgggg ttcactttgt gctttcctac gccaactctt cctgtgtggc tttgctggcc
                                                                      600
ttccactgag gaggcacata ggtttggagg acagatgagg gcccactgga gagctgtacc
                                                                      660
cctcagtgag ggccgccacc ttgatggttt ttgatggata atggggttga cctctttgtt
                                                                      720
ccttccacat gtttttatgt ttgaccattt gctcagctga gcttgtctta ataattggat
                                                                      780
tcatggttaa tgagccccac atgggcgaga gggtggcctt cattctgaac ccatttaggc
                                                                      840
agcacgggca gccctcctcg ccatgggcag gatcagagcc ccccgccca gtcttggggt
                                                                      900
tgctcctgga tgctgtctgg gaggcttgct catggtgaca tcctcatctc cccgtgcacg
                                                                      960
ttaccgcatt cagagettgg gtcacetgga cactgaacte aggtgaattt tetetgagat
                                                                     1020
cccgggagaa ggaggacagt tctttggaag gttttccagg gccgatcacg gaaaggatga
                                                                     1080
gaagggagag gtcctggtgg gggacacaat tacagtggca gtgtaacacc cggaaacttt
                                                                     1140
attgcgtgaa gtccctctca ctccctctac ctccttcttt tacgtggact ctgccaaaga
                                                                     1200
ccaggatacc agaatgccag tggagtgacc aagtgtagtg ggaccttggg aacgcgagtc
                                                                     1260
tggagccagg cggctggggt ttgcatcctg gttctgcccc tccttagctg gctgacatgg
                                                                     1320
cacaagccac ttaccctctc tgagccttac tgtcttcagt ggcaaatgga tctgtcaaca
                                                                     1380
ggccccattg cctggggttg ttactgctga gattaaggga tgctcqtcca taaaaaqact
                                                                     1440
```

<210> 3305

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tagcgttgtg cctggcacat agtgtatggt ggataaatgg gacttaggac taaaactcat
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                                                                     1560
ttggctgggc atggtggctc aggccaataa tcccagcact ttgagaggcc gaaaggggag
                                                                     1620
gatcgcttga gcccaggagt ttaggaccgg cctgggcacg gtgqtqaaqc ctcatatcaa
                                                                     1680
ccaaaaataa aaaaataaaa aataaagcca ggtatggtgg tgtgtgcctg tggtcccagg
                                                                     1740
tgctttggag gctgaggtgg gaggattgct ggagtctgga gggtcgggct gcagtgagct
                                                                     1800
gtggtcgtgc cactgcactc cagcctgggt gacaaagtga gactctgttt caaggaaaag
                                                                     1860
agagagagag agacagacag atccacaaga gtcttaagcc agaatcttca t
                                                                     1911
```

```
<211> 5433
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(2065)

<223> similar to gi5902966 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3305 cggacgcgtg ggatcattga atttgaccca aagtatactg ccttcgaagt ggaggaagat 60 gttgggctga tcatgatccc agtggtgagg ctacatggaa cttatggcta tgtgacagct 120 gatttcatct ctcagagete etetgecagt eceggaggtg ttgattacat tttgeatgge 180 agtacagtca cctttcagca tgggcaaaac ttaagtttta taaatatctc catcattgat 240 gacaatgaaa gtgaatttga ggagcccatt gaaattctac tcactggagc tactggagga 300 gcggtccttg ggcgccacct agtgagcaga atcataatag ctaagagtga ctctcccttt 360 ggagttataa ggtttctcaa tcaaagcaaa atttctattg ctaatcccaa ttccacaatg 420 attttatcac tggtgctgga gcggactgga ggactcttgg gagagattca ggtgaactgg 480 gagacagtag gacccaactc tcaagaagcc ttactgccac agaatagaga cattgcagac 540 ccagtgagcg ggttgttcta ttttggagaa ggagaaggag gagtgagaac cataattctg 600 acaatctatc ctcatgaaga aattgaagtt gaagagacat tcattattaa acttcatctt 660 gtgaaaggag aagctaaatt agactccaga gctaaagatg ttacattaac catacaagag 720 tttggtgacc caaatggagt tgttcagttt gctcctgaaa ctttgtctaa gaagacttat 780 tcagageete tggetetgga agggeeeetg etcattaeet tetttgteag aagagteaag 840 ggcacctttg gagagattat ggtttactgg gaattaaqta qtqaqtttqa cattactgaa 900 qactttcttt ccaccagtgg atttttcacc attgctgatg gagagagtga agctagcttt 960 gatgttcatt tgctaccaga tgaggtacct gagatagagg aagattatgt gatccaqctt 1020 gtttctgtag agggaggagc cgaactggat ctggagaaga gtatcacatg gttctctgtt 1080 tatgcaaatg atgacccaca tggagtattt gccctgtatt cggatcgcca gtcaatactt 1140 attgggcaga accttattag atccatccaa attaacataa cccggcttgc tggaacattt 1200 ggagatgtgg ctgttgggct tcgaatatca tcggatcata aagaacagcc gattgttacc 1260 gaaaatgcag agaggcagct ggtggtcaaa gatggtgcca catataaagt ggacgtggtg 1320 ccaataaaga atcaggtett ectateactg ggetetaatt teaetttgea actggtgaet 1380 gtgatgcttg tcggtggacg tttctatgga atgccaacaa ttcttcagga agcaaaatct 1440 gctgtccttc cagtctctga gaaagctgcc aattctcagg tcggatttga atccactgct 1500 tttcaactca tgaacatcac tgctggcaca agccacgtta tgatttctag gagaggcaca 1560 tatggagete teteggttge etggaceaet ggatatgete etgggttaga aatteetgaa 1620 ttcattgttg ttggcaacat gaccccaaca ctggggagcc tttcattttc ccacggtgaa 1680 caaaggaaag gagttttcct gtggacgttt cctagccctg gttggccaga ggcctttgtt 1740

```
cttcacctat caggagtgca gagcagtgct cctggcggag ctcaactccg atcaggtttc
                                                                     1800
attgttgctg aaattgaacc aatgggcgtc ttccaatttt ccactagctc aagaaatatc
                                                                     1860
atagtgtcag aagatacaca gatgatcaga ttacatgtac aaagactatt tgggttccac
                                                                     1920
agcgatctta ttaaagtttc ttatcagacc actgcaggaa gcgccaagcc actggaagat
                                                                     1980
tttgagcctg ttcagaatgg ggaactgttt tttcaaaaat tccaaactga ggttgatttt
                                                                     2040
gaaataacca ttattaatga tcagctttct gagatagaag aattttttta cattaacctt
                                                                     2100
acttcagtag aaattagggg attacaaaag tttgatgtta attggagccc acgcctgaat
                                                                     2160
ctagatttca gtgttgcagt gattacaata ttggataatg atgacctggc aggaatggat
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atttccttcc ccgagacaac tgtggctgta gcagttgaca caactctcat tcctgtagaa
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                                                                     2340
gtggttgcca ttgttactga ggcaactggt gtatctgcca tccctgagaa acttgtcacc
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tccattcatg gaacattcag ccttgggcca tccattgttt atattgaaga ggagatgaag
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aatggcacat tcaacactgc agaagttctt atccgaagaa ctggtgggtt tactggcaat
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gtcagcataa cagttaaaac tttcggtgaa agatgtgctc agatggaacc aaatgcattg
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ccctttcgtg gtatctatgg gatttccaac ctaacatggg cagttgaaga agaagacttt
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gaagaacaaa ctcttaccct tatattccta gatggagaaa gagaacgtaa agtatcagtt
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caaattttgg atgatgatga gcctgagggg caggaattct tctacgtgtt tctcacaaac
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cctcaagggg gagcacagat tgtggagggg aaggatgata ctggatttgc agcttttgcc
                                                                     2880
atggttatta ttacagggag tgaccttcac aatggcatca taggattcag tgaggagtcc
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cagagtggac tagaactcag ggaaggagct gttatgagaa gattgcacct tattgtcaca
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agacagccaa acagggcctt tgaagatgtc aaggtctttt ggcgagtcac acttaacaaa
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acagtcgtcg tgctccagaa ggatggggta aacctgatgg aggaacttca gtctgtgtca
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gggaccacaa cctgtacaat gggtcaaaca aaatgcttta tcagcattga actcaaacca
                                                                     3180
gaaaaggtac cacaggttga agtgtatttt tttgtggaac tatatgaagc tactgctgga
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gcagcaataa acaacagtgc cagattcgca cagattaaaa tcttagaaag tgatgaatct
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caaagccttg tgtatttttc tgtgggttct cggctggcag tggctcacaa gaaggccact
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ttaatcagtc tgcaggtggc cagagattct gggacaggac taatgatgtc tgttaacttt
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tctggaaagg attttgtgat aactgaaggc acattggtct ttgaacctgg ccagagaagc
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actgtattgg atgtcatcct aacgccagag acaggatctt taaattcatt tcctaaacgc
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ttccagattg tcctttttga cccaaaaggt ggtgccagaa ttgataaagt gtatgggact
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gccaacatca ctcttgtctc agatgcagat tcgcaggcca tttggggggct tgcagatcag
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ctacatcagc ctgtgaatga tgatattctc aacagagtgc tccataccat cagcatgaaa
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gtggccacag aaaacacaga tgaacaactc agtgccatga tgcatctaat agaaaagata
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ctttgttctc ttattaaccc aaagcgcaag gacactaggg gattcagtca ctttgctgaa
                                                                     3960
ttgactgaga attttgcctt ttctctgctg actaatgtta cttgcggctc tcctggtgaa
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aaaagcaaaa ccatccttga tagttgccca tatttgtcaa tattggctct tcactggtat
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cctcagcaaa tcaatggaca caagtttgaa ggaaaggaag gagattacat tcgaattcca
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gagaggctac tggatgtcca ggatgcagaa ataatggctg ggaaaagtac atgtaaatta
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gtccagttta cagagtatag cagccaacag tggtttataa gtggaaacaa tcttcctacc
                                                                     4260
ctaaaaaata aggtattatc tttgagtgtg aaaggtcaga gttcacaact cctgactaat
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gacaatgagg ttctctacag gatttatgct gctgagccta gaattattcc tcagacatct
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ctgtgtctcc tttggaatca ggctgctgca agctggttgt ctgacagtca gttttgcaaa
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gtctatgctc ggactgacaa cttgtcttca tacaatgaag ccttcttcac ttctggattt
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atgtttgcag ctaaacttct gactcacatg atggcagcca gcttaggtac acagattctg
                                                                     4680
tttctggcgt ctgcatacgc aagtccccaa ctcgctgagg agagctgttc agctatggct
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gctgtcacac attacctgta tctttgccag tttagctgga tgctcattca gtctgtgaat
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ttctggtacg tgctggtgat gaatgatgag cacacagaga ggcgatatct gctgttttc
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cttctgagtt ggggactacc agcttttgtg gtgattctcc tcatagttat tttgaaagga
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atctatcatc agagcatgtc acagatctat ggactcattc atggtgacct gtgtttatt
                                                                     4980
ccaaacgtct atgctgcttt gttcactgca gctcttgttc ctttgacgtg cctcgtggtg
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gtgttcgtgg tgttcatcca tgcctaccag gtgaagccac agtggaaagc atatgatgat
                                                                     5100
gtcttcagag gaaggacaaa tgctgcagaa attccactga ttttatatct ctttgctctg
                                                                     5160
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                                                                     5220
gttctctttg tcattttcaa cagtctgcag cttctagtac cctctgttct actttttact
                                                                     5280
tctatgagat caacattttt tagcttccac acagggactc tgacttcaag agagaagaaa
                                                                     5340
agtacttttg tacttacatg cctactgagc ccagattcca aaggccttgg ggttctatgt
                                                                     5400
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                                                                     5433
     <210> 3306
     <211> 895
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (802)...(236)
     <223> similar to gi3002527 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3306
ttttttttt ttagagactg tctcactctg tcacccaggc tgaagtgcag tggcacgaac
                                                                       60
ctcagctcac tgcaacctcc acttcctggg ttcaagtgat tctcctgccc cagcctccca
                                                                      120
agtagetggg accacaggea atgeaceace acaccaaget aatttttgta tttttagtag
                                                                      180
agatgaggtt tcaaccatgc tggccaggct gggtcttgaa ctcctgacct caagtgatcc
                                                                      240
acctaccaca gcctcctaaa gtactgggat tacaagcatg agccactaca cccgacctca
                                                                      300
tagtagtttt gatttacact tccctaatga ttgtgtccag catctactgg ccatttgtta
                                                                      360
gtggtttttt tcttctttta agaactgctg agacatccat aaacattttc aaaatgcagg
                                                                      420
gtatgttttt cagtgttaag gcaactgttc tgatgtgttt ttcctttqct ctctatcacc
                                                                      480
aaatactgta catataaata gtaagactgg gctttgtgtt gtccattgtt aatcctaaat
                                                                      540
gcaacaaaac acatggagac tttgaaaatc cttcagaata atgctatagt taagattttg
                                                                      600
ctaaagcaag tgtttttct aactccttga gctgcatatt gccttgagta atcatcatcc
                                                                      660
ggattgtatc ctcttcggtg gcacttttgt ttcttctgaa ttcttctctt gcccaatctt
                                                                      720
tcaggtattt gcgatcagaa tcatttggaa cttgccgaat tgtttgcaaa atccttctgt
                                                                      780
agaggagaag aacttgttgc cttcttacga actqctttaa cqttaqcqtc qctqqqqta
                                                                      840
agcgggaagc agccatgtcc accagagcca caggccggtc aatggggcct tcgat
                                                                      895
    <210> 3307
    <211> 2130
    <212> DNA
    <213> Homo sapiens
```

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (685)...(1841)
<223> similar to gi5524739 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3307
gggtcgaccc acgcgtccga tggagtgtag gccggccggc gagactgcac ctcccagcat
                                                                       60
gccttgcagc caggactgga gtcggtactt aagagtgatg gggttcccta gatactttag
                                                                      120
gccgtcgcat cgattataga gattgaggtg gaacccgggg cctgggaact ggacgcacgc
                                                                      180
ggagggcgaa gatggaagcc tggcgctgtg tgaggaaggg ctacggccac tgtgtggtgg
                                                                      240
gaagaggccg ataccccatg tttccccatc actcgaggag tctgggcaga gactggacta
                                                                      300
caccgtggga gaatctgcaa aggtgttgct ggaacagaca tatttctagt tgtatgaggt
                                                                      360
ggcctggaca ttactctcga gctccttacc catacttcag tagtaggcat ttttcactaa
                                                                      420
attggagacc accetgtttg tttgagteta gaactcagtt ccagtactgt aactggagac
                                                                      480
ctgacaacct gagccagaca tctttgattc atctctctag ttacgtcatg aacgctgagg
                                                                      540
gagatgagcc ttcatcaaaa cgaagaaaac accaaggtgt gataaagcgg aattgggaat
                                                                      600
atatatgtag ccatgataaa gaaaaaacga agatcctagg agacaaaaat gttgatccca
                                                                      660
aatgtgaaga cagtgagaac aagtttggac ttttcagtga tgtcctataa tatactttca
                                                                      720
caagaattcg gcacgaggat aactctcacc tttatagaca ttgccggcgg ccagtattac
                                                                      780
actggagttt taggtttccc aatatttctg aaaggaattt aaacattttg gtggcagacg
                                                                      840
tactttggtt tgcaagaagt tcaagaagat cattatggag cagagatcag gccaagtttg
                                                                      900
gaatcactgg gttatcactg tgaatataag atgcggacag gaaggaaacc tgatggctgt
                                                                      960
gctatttgct tcaaacattc caaattttca ctcttgtcag tgaacccagt ggaattcttc
                                                                     1020
cgccctgata tttctctgtt ggacagagac aatgttggga ttagttttac tcttacagcc
                                                                     1080
caaaattcca tatgcttgcc tgccctgcaa tctggcgtag caaattacgg catctgttgt
                                                                     1140
attaatccag ggcgaggtga tattaaggtt gacgcaattg gcaatgctac tggcagagat
                                                                     1200
ttccagtgtt gcccaccaga aagatggcag cttctgccct attgttatgt gtggtgactt
                                                                     1260
taattctgtt cctggttctc cactatatag tttcataaag gaaggaaaat tgaattatga
                                                                     1320
aggacttccc ataggaaagg tatctggcca ggaacagtct tcacggggac aaagaatttt
                                                                     1380
atctattcca atttggcccc caaacctagg tatctcacag aactgtgtgt atgaggtaca
                                                                     1440
gcaggtacca aaagtagaaa agacagacag tgatctgaca caaacacagc tgaagcaaac
                                                                     1500
agaggtccta gtgacagctg aaaaattgtc ttcaaattta cagcaccatt tcagtttgtc
                                                                     1560
atctgtttat tcacattact ttcctgacac tggaattcca gaagtgacca cctgtcattc
                                                                     1620
ccgaagtgcc ataactgtgg attatatttt ctactctgca gaaaaggaag atgttgctgg
                                                                     1680
gcacccagga gctgaagttg ctttggttgg tggcttgaaa cttctaqcta qactqtcact
                                                                     1740
tottacagaa caagacttat ggactgttaa tggacttcca aacgaaaata actottcaga
                                                                     1800
tcatctgcct ttattggcaa agttcagact tgagctctga ctctctttga tcacatacta
                                                                     1860
attttctttc caatttgtat tgtttttcaa agaatgtaaa gttcttaagt gtatgcatgt
                                                                     1920
tgtttatttt tgcactgtgg agattctgaa gcggttatgt tagatgcttt gaaactccat
                                                                     1980
atcagaagaa ataactttat aacaattttt tttaataatg aaaaatattt tcctgacaag
                                                                     2040
tgagctctaa attctcttta ttgtaaaaga gatgtaaagg ttttatattc taaatcctag
                                                                     2100
taaaattgac agtgattttt aaaaaaaaa
                                                                     2130
```

```
<210> 3308
<211> 3569
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(2856)
<223> similar to gi219944 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3308
agcggccggg gccacgatgg agcgcgacgg ctgcgcgggg ggcgggagcc gcggcggcga
                                                                      60
gggcgggcgc gctccccggg agggcccggc ggggaacggc cgcgatcggg gccgcagcca
                                                                     120
cgctgccgag gcgcccgggg acccgcaggc ggccgcgtcc ttgctggccc ctatggacgt
                                                                     180
gggggaggag ccgctggaga aggcggcgcg cgcccgcact gccaaggacc ccaacaccta
                                                                     240
taaagtactc tcgctggtat tgtcagtatg tgtgttaaca acaatacttg gttgtatatt
                                                                     300
tgggttgaaa ccaagctgtg ccaaagaagt taaaagttgc aaaggtcgct gtttcgagag
                                                                     360
aacatttggg gaactgtcgc tgtgatgctg cctgtgttga gcttgggaaa ctgctgttta
                                                                     420
ggattaccag gggggacgtg cataggaacc aggaacatat atgggacttg caacaaattc
                                                                     480
aggtgtgggt gagaaaaggt tgaccagaag cctctgtgcc tgttcagatg actgcaagga
                                                                     540
ccaggggcga ctgcctgcca tccaacctac agttcctgtg tgtccaaggt gaagaaagt
                                                                     600
tggggtagaa agaacccatg tgagagccat ttaatggagc ccacagtgcc ccagcagggt
                                                                     660
ttgaaacgcc ctccctaccc ctccttattt tcctttggat ggattcaggg cagaatattt
                                                                     720
acacacttgg ggtggacttc ttcctgttat tagcaaacta aaaaaatgtg gaacatatac
                                                                     780
taaaaacatg agaccggtat atccaacaaa aactttcccc aatcactaca gcattgtcac
                                                                     840
cggattgtat ccagaatctc atggcataat caacaataaa atgtatgatc ccaaaatgaa
                                                                     900
tgcttccttt tcacttaaaa gtaaagagaa atttaatcct gagtggtaca aaggagaacc
                                                                     960
aatttgggtc acagctaagt atcaaggcct caagtctggc acatttttct ggccaggatc
                                                                    1020
agatgtggaa attaacggaa ttttcccaga catctataaa atgtataatg gttcagtacc
                                                                    1080
atttgaagaa aggattttag ctgttcttca gtggctacag cttcctaaag atgaaagacc
                                                                    1140
acacttttac actctgtatt tagaagaacc agattcttca ggtcattcat atggaccagt
                                                                    1200
cagcagtgaa gtcatcaaag ccttgcagag ggttgatggt atggttggta tgctgatgga
                                                                    1260
tggtctgaaa gagctgaact tgcacagatg cctgaacctc atccttattt cagatcatgg
                                                                    1320
catggaacaa ggcagttgta agaaatacat atatctgaat aaatatttgg gggatgttaa
                                                                    1380
aaatattaaa gttatctatg gacctgcagc tcgattgaga ccctctgatg tcccagataa
                                                                    1440
1500
gcacttcaaa ccttacctga aacatttctt acctaagcgt ttgcactttg ctaagagtga
                                                                    1560
tagaattgag cccttgacat tctatttgga ccctcagtgg caacttgcat tgaatccctc
                                                                    1620
agaaaggaaa tattgtggaa gtggatttca tggctctgac aatgtatttt caaatatgca
                                                                    1680
agccctcttt gttggctatg gacctggatt caagcatggc attgaggctg acacctttga
                                                                    1740
aaacattgaa gtctataact taatgtgtga tttactgaat ttgacaccgg ctcctaataa
                                                                    1800
cggaactcat ggaagtctta accaccttct aaagaatcct gtttatacgc caaagcatcc
                                                                    1860
caaagaagtg cacccctgg tacagtgccc cttcacaaga aaccccagag ataaccttgg
                                                                    1920
ctgctcatgt aacccttcga ttttgccgat tgaggatttt caaacacagt tcaatctgac
                                                                    1980
tgtggcagaa gagaagatta ttaagcatga aactttaccc tatggaagac ctagagttct
                                                                    2040
ccagaaggaa aacaccatct gtcttctttc ccagcaccag tttatgagtg gatacagcca
                                                                    2100
agacatetta atgeceettt ggacateeta taeegtggae agaaatgaea gtttetetae
                                                                    2160
ggaagacttc tccaactgtc tgtaccagga ctttagaatt cctcttagtc ctgtccataa
                                                                    2220
atgttcattt tataaaaata acaccaaagt gagttacggg ttcctctccc caccacaact
                                                                    2280
aaataaaaat tcaagtggaa tatattctga agctttgctt actacaaata tagtgccaat
                                                                    2340
gtaccagagt tttcaagtta tatggcgcta ctttcatgac accctactgc gaaagtatgc
                                                                    2400
tgaagaaaga aatggtgtca atgtcgtcag tggtcctgtg tttgactttg attatgatgg
                                                                    2460
accgttgtga ttccttaaga gaatctgagg caaaaaagaa gagtccatcc cgtaacccaa
                                                                    2520
gaaaattttt ggattcccaa ctccacttcc ttttattggt gctaacaagc tgttaaagat
                                                                    2580
acatctcaga cgcctttgca ctgtggaaaa cctaggacac cttaggcttt ccattttgcc
                                                                    2640
ttcacaggga ctggattaac agcgagacgt gtggtgcatg gggaagcatg actcctcatg
                                                                    2700
gggttgaaga attcgttaaa tgtttacaca gagcaccgga tcacaggatg ttgaggcaca
                                                                    2760
tcacttggac tcagcttcta tcaacaaaga aaagagccag tttcagacat tttaaagttg
                                                                    2820
aaaacacatt tgccaacctt tagccaagaa gactgatatg ttttttatcc ccaaacacca
                                                                    2880
tgaatctttt tgagagaacc ttatatttta tatagtcctc tagctacact attgcattgt
                                                                    2940
tcagaaactg tcgaccagag ttagaacgga gccctcggtg atgcggacat ctcagggaaa
                                                                    3000
cttgcgtact cagcacagca gtggagagtg ttcctgttga atcttgcaca tatttgaatg
                                                                    3060
tgtaagcatt gtatacattg atcaagttcg ggggaataaa gacagaccac acctaaaact
                                                                    3120
gcctttctgc ttctcttaaa ggagaagtag ctgtgaacat tgtctggata ccagatattt
                                                                    3180
gaatctttct tactattggt aataaacctt gatgggcatt ggggcaaaca gtagacttat
                                                                    3240
agtagggttg gggtagccca tgttatgtga ctatctttat gaggaatttt aaagtggttc
                                                                    3300
```

```
tggatatett ttaaettgga gttteattte tttteattgt aateaaaaaa aaaaaattaa
                                                                     3360
gcagaagcca aaatactttt gagaccttgt ttcaatcttt gctgtatatc ccctcgaaaa
                                                                     3420
tccaagttat taatcttatg tgttttcgtt ttaaattttt tgattgggag tttctttaga
                                                                     3480
ttttaatggt tccaaaggag ttcaactttt gaggggacga tctttgaata tacttaccta
                                                                     3540
ttataaaatc ttactttgta tttgtattt
                                                                     3569
     <210> 3309
     <211> 1052
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2)...(653)
     <223> similar to gi3002527 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3309
ttttttttt ttgagacgga gtctcgctct gtcgcccagg ctggagtgca gtggcgggat
                                                                       60
ctcggctcac tgcaagctcc gcctcccggg ttcacgccat tctcctgcct cagcctcccg
                                                                      120
agtagetggg actacaggeg ecegecacea egeceggeta attttttgta tttttagtag
                                                                      180
agacggggtt tcaccgtgtt agccaggatg gtctcgatct cctgacctcg tgatccgccc
                                                                      240
gcctcggcct cccgcctgcc tcagcctccc aaagtgctgg gattacaggc gtgagccact
                                                                      300
acgcccggcc tttgcttctt tgcataatct cagctgagat ttataattta cttgtgggat
                                                                      360
tctcccctct caaactataa gttctgtgaa gacagagatg gtatttttt ctcctcactc
                                                                      420
tattttttt ttttagacgg agtctggctc tgtcgcccag gctggagggc agtggcgcga
                                                                      480
teteggetea etgeaagete egeeteeeg gtteaegeea tteteetgee teageeteee
                                                                      540
gagtagctgg gactacaggc gcctgccacc acgcccggct aattttttgt atttttagta
                                                                      600
gagacggggt ttccccgggt taggcaggac ggtctggatc tcccgacctc gtgatccgcc
                                                                      660
egecteggee teceaaagtg etgggattae aggegtgage cacegegeee ggeeeetet
                                                                      720
tccccaattt ttcatacagt tgcccctata caatatacac acccttgagg gcaggtagaa
                                                                      780
gtccagccca cctgcggcca gggacgctgt ggggaagcat ttttctcctg agttgctaag
                                                                      840
aagaaccctg atgggcggtg agcagaagga ccacaagacc agccagggtt ccaggctggc
                                                                      900
agcggataag gccagagaga tcgctaggcc ccagaaagcc ccctactttc agtcagggtg
                                                                      960
ggacagaggg cttcgacata aaatggaagc aagccttgag aaggaaccag gagaccttgg
                                                                     1020
agccctaaag ttggggccag ccgggaaatg gg
                                                                     1052
     <210> 3310
     <211> 2575
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
```

<223> similar to gi3874338 in the genepept database release 114,

<222> (2371)...(1792)

<400> 3	3310					
ctgcggcccc t	gccggttac	ataactcqtt	acagactcca	cacaatccca	cttcccaact	60
cccttcgcct c	caggatgcg	ctgagcccta	caacaccccc	adcddccdcc	ggctcccca	120
cgaggtgtga a	tgacagagg	tagtaccatc	cagcgcgctc	agcgaggtca	acctacacct	180
cctctgccac g	gatgacatag	acactgtgaa	gcacctgtgt	ggcgactggt	tccccatcga	240
gtacccagac t	catqqtatc	gtgatatcac	atccaacaag	aagttctttt	cccttactac	300
aacctacaga g	gtgccattg	tgggaatgat	agtagctgaa	attaagaaca	ggaccaaaat	360
acataaagag g	gatggagata	ttctagcatc	caacttctct	gttgacacac	aagtcgcgta	420
catcctaagt c	tagacatca	tgaaagagtt	caggaagcac	ggcataggtt	ccctcttact	480
tgaaagttta a	aggatcaca	tatcaaccac	cacccadac	cactgcaaag	ccatttacct	540
gcatgtcctc a	ccaccaaca	acacagcaat	aaacttctat	gaaaacagag	acttcaagca	600
gcaccactat c	tcccctatt	actactccat	tcgaggggtc	ctcaaagatg	getteaceta	660
tgtcctctac a	tcaacggcg	ggcaccctcc	ctggacgatt	ttggactaca	tccagcacct	720
gggctctgca c	tagccagcc	tgagcccctg	ctccattccg	cacagagtet	accaccaaac	780
ccacagcctg c	tctgcagct	tcctqccatq	gtcgggcatc	tcttccaaga	gtggcatcga	840
gtacagccgg a	ccatgtgat	gtcggctggg	cagccgccac	caggccccac	ccttcaacca	900
cccgcagagc c	cgccttcct	gtccatctga	ccccttctat	tttctgcaag	gagctgccag	960
ccatctaact g	ggctcgtcg	gcctgcccca	gctgcaggcc	caatactaca	caaactcaaa	1020
aacagaacat c	gtgggcatg	cqcaqaqcat	gcccatccgt	ggcaggtacg	ccacagcaga	1080
cacaaaggct c	ttcagctcc	cctccctqct	tctqqaaacc	tctacctact	accetaacce	1140
tgccccctg c	gcatgcacc	atccccaggg	ctgacccagt	gtggctgcat	tcactgggag	1200
gggcctgccc t	cactgggcc	tctcccactc	cactacctat	tcttgcagct	ccttcctgga	1260
aagctggagg g	gactttctc	ctgcaaggga	ggaacgcaag	tattatggac	acacttgacc	1320
gtaaaggcac a	iggagcctcg	gaacaagggg	gcgcaataaa	gggaatggcc	catccccttc	1380
cagaaccagc c	caaagaagc	ctggggggtg	aggagtggcc	cccactcctc	catgaggggc	1440
tgatgagggg t	gggcagcct	gggggaggct	ttcctcgcaa	gcacagaget	ctgaggctca	1500
gccccctggc a	caggcggtc	acgcatcagg	acggttccta	ctcctcagca	ccttccatac	1560
agttaccagt g	ccctgggag	gtcacactgc	ccgtcggacc	ttggcatgct	ccattcagct	1620
gacctgctga g	gacaggcat	cgccgagact	ccttgggtcc	tecceqeeet	ccctcatgct	1680
gccacaagct g	ctgctccaa	ggcctggcca	catgcagaca	ggaggaagct	gagetegaea	1740
ttaggcctca a	ggctgccat	ctgtcttgta	gggcctggcc	ttgtgggcag	ggggcagtcc	1800
tgtgccttgt g	ggccctcag	cctctgaggg	cagagatgct	gtcagtgccg	caggtgcatc	1860
acatacttct a	gcatcctct	ccaccctgca	ttccaaatgc	tgcttgctgc	ctgccctgcc	1920
ctccgatgca g	gggtggggt	gggggcggag	tcccgcccag	catagctgca	gtgtcacaaa	1980
gccatggcag a	gggtcctag	cggcgccacc	ctgccccagc	ctgaggagga	gggagaggga	2040
ggaacaaccc t	gggcagacg	gggtctcagg	gacctgtgtc	cttccgcctc	cagagetgee	2100
cagccacggg c	tctcagggt	gctggggcag	ccccaggtcc	cctcttgaac	tcagctgggg	2160
ccaggggccc t	cagaatgaa	ggcaggcacc	aggcaggagc	agcatcccc	tccttgacgg	2220
tgctggcagg a	gggccgcgc	catgctgact	gcttgaacct	ctgctgacct	gacagtgctg	2280
gcgggagggc c	gcaccatgc	tgactgcctg	aatctctgct	gaggctgcct	gcctgccggg	2340
cccagctcag c	gccctctcc	actgcgaatc	agtggcgatc	atgtgatttc	tatttctgcc	2400
ccacagggta a	gggacgagt	cttctggaag	gctctgccat	ggacatttgt	cctcgggctc	2460
agaggcccca c	cctgcccca	cacctgcccc	taatcactgc	agtgtccagc	ccagtgttga	2520
acagattgta g	cgttctgtc	tcattacgag	caaataaata	gactttcatt	ggaaa	2575

<210> 3311

<211> 408

<212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (409)...(131)
     <223> similar to gill77607 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3311
gcaaattaag acaggagcag ctcctgggag aagcagacac caaacaatac ggctgctggc
                                                                       60
ccagaggtca aaaaccatgg cctagagggg gcggtcagga agtgggacat taggccgggc
                                                                      120
gtggtggccc atgcctgcaa tcccagcatc tttggaggcc aaggcaagtg gatcacctga
                                                                      180
gttcaggagt ttgagaccag cctggccaac atggtgagac ttcgtctcta ctaaaaatac
                                                                      240
aaaaaaaatt cgctgggctt ggtggcgggt gcctgtaatc ccagctactc gggaggctga
                                                                      300
ggcacaagaa teeettgage etggggagge agaggttgea gtgageeaag ategeaceae
                                                                      360
tgcactccag cctgggcaac agagcaagac tccatctcaa aaaaaaaa
                                                                      408
     <210> 3312
     <211> 1931
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1774)...(1255)
     <223> similar to gi3212854 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3312
ttttttttt ttgggtgttt tattatttat ttacttgaca ggtaacatcg atttggtcct
                                                                       60
acaagacacc atgctatagg cttagctact tgctgttgca caagagaact ttcctgaact
                                                                      120
ctcaggaagc ccttgcatgg cctatcgagg acagctcagt cactgaaggg aaaaattcca
                                                                      180
taccaaagaa gagagaaaaa ttccatacca aagaacagac ttcccccagg gaacctccgt
                                                                      240
cctacagccc ttcagggcca tcacactcac acacatcagc catcatcaaa atagtggcca
                                                                      300
tgctgggaag aacaggagtc ctgaactaga aggtggtctt caaaccatgg cgtaccgatt
                                                                      360
tatgtatatt acagatagat aaattaagag gtctacatga ataaaaaatc tctcaaaggg
                                                                      420
gaacgaattc cattctgtca tgccaggtgt ttgtcagaac cttgaaaacg aaggtggttt
                                                                      480
tcagtggagc ttgtattaaa aatagaaggt atttatacac aggccctgct cctctcatgg
                                                                      540
ccatgaaatc ctctggtgtt gtcaggaccc ctgggcaacc tcagcacccc tacgggtagc
                                                                      600
ccatctgcag tctgcatctt ccgggagagc aggggactcg taccggggct tttctcctgg
                                                                      660
gtccccatct cggcttggcg acgcctccgg acccaggggc tgccagaggg agtgacgctg
                                                                      720
ctgtcagagg aataatccat acacttgcgg aagatctcag ggctggtgct gcagttcagt
                                                                      780
ctaccttcct ccgccagtgg ggactttctg gaaacgcctt tgcqttqqqc caaqqqqctq
                                                                      840
ctccaaggac ttgtgcacgg ggaggcattt ggactcagaa agagattctg gtggccagac
                                                                      900
gggctgagct tgttggtggc cgcgtgccgt cggcccgcca taggggatgt ggggttgctc
                                                                      960
teggggteag aggagetgtt ggeagaagae teateaceea tgtaetgaag etectegaet
                                                                     1020
ctcttgttca gggacttgtt caggtggatg ctcgcagtgg gctcctcgtc atgatttttg
                                                                     1080
```

```
tetttggcag gtttettttt gggtggette ataccaatea ggacagettt catgttetet
                                                                    1140
ttgccctgag attctgtgat catgaactca tgggctttga tggctgcttc cacctcctcg
                                                                    1200
aactccacga tggcacactc ctgggtcccc acttggctgt agcggctgct gatcctccgg
                                                                    1260
atgtcagggg gcagctctct cccaggtttg aggatccgca ctgatgagat gactccaaaa
                                                                    1320
gtcccgaaaa gcttgagcag gtgttccatc accttctctt gcacccttcc attcttctgg
                                                                    1380
ggggtggcca gagcccacag cttaggagac aagtagagat catagcccag gagcatcttg
                                                                    1440
ctggggaggt tctcgttggg gaacagtggg acgggggtgg tcctcctcac cttccggtgg
                                                                    1500
tecteattea acteaaggae caetgaatae tteaaageat gtgetgtggt tetecagtee
                                                                    1560
cgtgtaagat gtttcacctt tttgaaggat gtgagtagct taacgctcac atatcccagc
                                                                    1620
ttgttcctcc tcacgtgttt tagcaaaaag gcgtccttct ccaggttttc atcagaaaag
                                                                    1680
tagaattaaa totggtocac cagtttottg atcaactoot catcoggggg ottocactoo
                                                                    1740
tgctccaggt cctcacgctc gttctcacct ccacttgcag tggtgccact gtgcccgcgg
                                                                    1800
ctcggctcct cctcgctcgc gctgccccag ccggggctga ggtaccgggc cgggtccccq
                                                                    1860
gcgccccgag tctccgcccc aacctcatcg tcctccaact cgtccacgtc ctcggcctct
                                                                    1920
tggcctcgtg c
                                                                    1931
```

```
<211> 511
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (24)...(155)
     <223> similar to gi1799988 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3313
gaattcgagc tcgcgacccg gagatccgta accgtgagaa gacccatcat tatgcccgaa
                                                                       60
tgggttacac agaatattat gaatggccgc ggcgttaatc gtctggatga tgttaatcgg
                                                                      120
ccaaaaagcc cggaaatcaa gaacgatatt cgtctgttcc gccaggagct gcgtgatgcc
                                                                      180
gettateatt tecagggega tgeegaeaae gateagettt etgtaaegee getagtgggg
                                                                      240
ctggggaaat cgagtctgtt gaacaagacc attttccatc ttatgccttg tgccgagcag
                                                                      300
aaactaacca tctgtacgcc atacttcaac ctgccaqcaa tccttgtgcg caatattatc
                                                                      360
cagttgctgc gcgaagggaa aaaggtcgaa attattgttg gtgataaaac cqcqaatgcc
                                                                      420
ttctacattc cgtacgatgc gcctaacatg ataatcggca cggtgcttca tctctatacg
                                                                      480
atgtacgggt cgcgacattg aattcgtaat c
                                                                      511
```

```
<210> 3314
<211> 1227
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (13)...(270)
```

<210> 3313

<223> similar to gi1710216 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3314
cagttttttt tttttttt tgctgcatga ttttattact ataaatatac agtaaaaacg
                                                                       60
aaccaacgat gagcccatct gagcacatca gacggcagca catgggagtc ccagcgggcc
                                                                      120
actctgcggc ccgaacttca cgcaaagctc tggcaccagg actgatggcc agaggctggg
                                                                      180
gccttggtgg gggcggggg cgggcggtgc agggggctgt gtgttgtt ggggagaggt
                                                                      240
gcatgggggg agagaggtgc ttggggtggg gtagaggtgc gtgggagatg ctcggtccga
                                                                      300
gtgcacacac atgcatggga acatgtgcag gagtatgtgc gtgtgtgtat gcgtgacagc
                                                                      360
atgtgtgagc gtgagtgtgc atgtgtgaac gtgtgcgtga gcatgtgcaa gtgggcgtgc
                                                                      420
atttgtgtgt gtgtacgtgt gagcgcatct gcgtgcctgt gcacgagcgg gaggggtggc
                                                                      480
tggcctgggt gtgcagggag ctgggtgtga ggaccgtgct gtccactgct gggtctcgcc
                                                                      540
caggaggcag agctcatgct cggagccacc gtgagcctca gggagggtac tgagctgccc
                                                                      600
cacagoogac ctgtccccag gcccccactg cagggcagcc ctccagagcc aggtgagcag
                                                                      660
cagacacctt gcctggccca aggctccgca ggggtggatc catgccctgg gtcaccacgg
                                                                      720
cccaggcact ccctttgcca tctgcggccc caggaggttt acctataaaa aaaacaaaca
                                                                      780
aacaaacaaa caaaacagga cgaggtcgcc cagaggccaa gcctccccqg ccqqqacccc
                                                                      840
attocccagg tgtgctgctg gcttcctcct ccctgggccc agcctgccac agaaagcctg
                                                                      900
agacagaaca aaccaaatca gagagaactg caagggggcc gggcgcggag gctcacgcct
                                                                      960
gtaatctcag cactctggga ggccgaggca ggtggatgac cttaggagtt tgagaccagc
                                                                    1020
ccggccaaca tggtgaaatc ccttctctac taaaaaataca aaaaaattag ccgagcatgc
                                                                    1080
tggtaggcac ctgtaatccc cagctactca ggagcctaag gcaggacgat cacttgaacc
                                                                    1140
cgggaggcgg aggttgcagt gacccgagat tgagccactg cactccagcc tgggcagcaa
                                                                    1200
gagtgaaact ccatctcaaa aaaaaaa
                                                                    1227
    <210> 3315
     <211> 1504
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1401)...(1143)
     <223> similar to gi1872200 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3315
gacttccgac gagctgggtc ggggacacgg tgaagaggct ccagcgggac ctgcccatca
                                                                      60
gtcctgggcc aggagggct ccaagcagca cccagcggtc cgggggagtc tcagacccgg
                                                                      120
catgcgtggc tggcagacct gggagagcca gggcagggtt ttgcgttcag agaaggattg
                                                                     180
ccccagagac ccgtggtgga cttcatgggt gctgagtggc ccgtgtgaca gtgatgacac
                                                                     240
gaaggetteg gegtttgagt gggtgeaggt geacgeeagg gettggtget teeetgeetg
                                                                     300
gccctggagg gagctgggtg gcctggcttc aggggaagac aggagccagg acacacgtca
                                                                     360
gcccagcagg tgtggggggt gctgcagccc tcggcagtgg ggtcaggccc tgggggatgt
                                                                     420
ttccaatggt gggcagcctg gccaggccgg agaagacatg ttcacgggca tctatcagat
                                                                     480
gcccccttga ggaggctgag ttatttgagg gctgctgcaa agtacqctag gctcaaattc
                                                                     540
```

```
tettttecca gecagagece tggccacacg gacteagagg ggccaceggg gtggggaaag
                                                                      600
gacccctccc ccaccccccg cagccactgg cctccagctc tcggccacag aatggcctct
                                                                      660
aaggctgact cagccgctcc cttgggctgt ggcagcagga ggcgggggct ctggctcagg
                                                                      720
ccccggagcc tgtgcagctt gcccatggcc ctaggcagcg aggggacagc ctgggggact
                                                                      780
tcctgcctag gcaaggtcat tggccgggcc tggcctgtgg atagtggggc caggggccgg
                                                                      840
cccaggccaa atgagtgccc tccttgttat gacaccaagt gactacaagg gaggcaagac
                                                                      900
ccctccaggc ctctcagccg acactgggtc ccaccacaca cagtgactgt gccgtgcagt
                                                                      960
gcaggttctg gccttttcct tgaaggcatc tggtagaccc gaagccacgc tctcqqqccq
                                                                     1020
cacatgcacg ccgcagcacc agctgccctg agctgcttgt acaaccaaac acctttcccc
                                                                     1080
tcttctccag ctgtaacctg gagagtcagc catgccttgt cttttgttct cataaatagt
                                                                     1140
cactggggcc gggcgcagtg actcacgcct gtaatcccag cactttggga ggccqaqqtg
                                                                     1200
ggcggatcac ctgaggtcag gagttcaaga ccagcctggc caacatggtg aaaccccgtc
                                                                     1260
tctactaaaa atacaaaaat tagctgggtg tggtggcggg cgcctgtaat cccaqctact
                                                                     1320
cgggaggctg aggcaggaga atcgcttgaa cccaggaggt ggaggttgca gtgagccgag
                                                                     1380
atcgcgccac tgcactccag cctgggtgac aagagtgaaa ttctgtctca aaaaataaat
                                                                     1440
acataaataa ctaagactca gagagtacag tcaagatatt aatagtcaaa agttgtcgca
                                                                     1500
acag
                                                                     1504
```

```
<220>
    <221> misc feature
    <222> (419)...(143)
     <223> similar to gi1872200 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3316
cagtccttgt tcccccagga agggctggtg ggccccagca cacacttggg attatgtgta
                                                                       60
tacataaata aatattgggc tgtttccctc ttcctgtgaa gtggttctca aattcctatg
                                                                      120
tactgtaaag ctgtaccctt aaaagtacag atgtggccgg gcacagtggc tcacgcctgt
                                                                      180
aatcccagca ctttgggagg ctgaggcggg tggatcactt gaggtcagga gttcaagacc
                                                                      240
agcctggcca acatggtgaa acctcgtctc cgctagaaat acaaaaatta gccaggcgtg
                                                                      300
gtggcgggca cctgtaatct cagctactcg agaggctgag gcaggagaat ctcttgaacc
                                                                      360
tgggaggtgg agattgcagt gagccgaggt cgtgccattg cactccagcc tggacatcaa
                                                                      420
agtgagactc aggccaaaaa aaaaa
                                                                      445
```

```
<211> 1198
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<210> 3317

<210> 3316 <211> 445

<212> DNA

<213> Homo sapiens

```
<222> (174)...(803)
<223> similar to gi3169037 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3317
aaaatctttc ctctaaagtc aaactgttgc agttgtattc agaggccagt gtagcgcttc
                                                                       60
taaaactgaa taaccccaag gattttcaag aattgaataa gcaaactaag aagaacatga
                                                                      120
ccattgatgg aaaagaactg accataagtc ctgcatattt attatgggat ctgagcgcca
                                                                      180
tcagccagtc taagcaggat gaagacatct ctgccagtcg ttttgaagat aacgaagaac
                                                                      240
tgaggtactc attgcgatct atcgagaggc atgcaccatg ggttcggaat attttcattg
                                                                      300
tcaccaacgg gcagattcca tcctggctga accttgacaa tcctcgagtg acaatagtaa
                                                                      360
cacaccagga tgtttttcga aatttgagcc acttgcctac ctttagttca cctgctattg
                                                                      420
aaagtcacat tcatcgcatc gaagggctgt cccagaagtt tatttaccta aatgatgatg
                                                                      480
tcatgtttgg gaaggatgtc tggccagatg atttttacag tcactccaaa ggccagaagg
                                                                      540
tttatttgac atggcctgtg ccaaactgtg ccgagggctg cccaggttcc tggattaagg
                                                                      600
atggctattg tgacaagget tgtaataatt caccetgega ttgggatggt ggggattget
                                                                      660
ctggaaacag tggagggagt cgctatattg caggaggtgg aggtactggg agtattggag
                                                                      720
ttggacagcc ctggcagttt ggtggaggaa taaacagtgt ctcttactgt aatcagggat
                                                                      780
gtgcgaattc ctggctcgct gataagttct gtgaccaagc atgcaatgtc ttgtcctgtg
                                                                      840
ggtttgatgc tggcgactgt gggcaaggta tgtttactgc caaacaaata agaatgggag
                                                                      900
cataaaacat ccttgacagg tagagagagt tttgaatggc ttttgttatt taaaataatg
                                                                      960
attctctgtg tatcccttta ccagccttgc attcaaacta gttatgaaag taagagaaca
                                                                     1020
acataaatca ctgaagagga tcttttcctg ttattgttgc agtctggtgt tttgtttgt
                                                                     1080
tttgttttgt ttggaccaag cagatttacc ttagctgaaa atatgtggtg aagttttaat
                                                                     1140
ttggaaacaa aaaaggatat caataattca ttaaataaag atggttcaaa cactggaa
                                                                     1198
     <210> 3318
     <211> 1031
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(668)
     <223> similar to gil321816 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3318
ctactactgg cctgccgcag catggactgt tacctggcca ttgtccatgc cacacgcaca
                                                                       60
ctgacccagc agcgccactt ggtcaagttc atatgtctgg gtttgaggaa cctgttcctg
                                                                      120
ttactgtccc tacgcatctt gcttttccga aggaccttct acccatccaa tgttagccca
                                                                      180
gtctgctatg aggacatggg caacaataca gcaaactggt ggatgctgtt acggatcctg
                                                                      240
ecceagteet ttggetteat egtgeegetg egateatget qttetgetae agatteacee
                                                                      300
tgcatacgct gtttaaggcc catatggggc agaagcactg gaccatgtgg gtcatctttg
                                                                      360
```

420

480

540

ctgatgccct cattttcctg ctctgctggc tggcctacaa cctggacctg ctggcagaca

ccctcatggg aacccagatg accaatgaga cctgtgagcg ccgcaacgac atcaaccagg

ccctggatgc cactgagatt ctgggcatcc ttcacagcta cctcaatccc ctcatctacg

```
ccttcattgg ccagaagttt tgccatggac ttctcaagat tatagccata catggcttga
                                                                      600
tcagcaagga ctccctgccc aaagacagca ggccttcctt tgttggctct tcttcagggc
                                                                      660
acacttccac tactctctaa gacctcttgc ctaagtgcag acccgtgggg ttcctccctt
                                                                      720
ctcttcacag tcacattcca agcctcatgt ccactagetc ttcttggtct cagtgtcagt
                                                                      780
gcagccccca ctgtggtcgc aggaagcaga ggaggccacg ttcttactag tttcccttgc
                                                                      840
atgatttaga aagcctgccc tggtacctca ccccttgcca taattactac atcacttgct
                                                                      900
ggagctctgt ccctcctgcc cttgagctca tggcactcta tgttctaaga agtgaaaatc
                                                                      960
tacactccag tgagacagct ctgcatactc attaggatgg ttaatgtcag aagaaagaaa
                                                                     1020
atcataaaat a
                                                                     1031
```

```
<210> 3319
<211> 2416
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(2417)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2383)...(2122)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters

<400> 3319

<tttttttttttttttca caagttatat tttatttaa cacgaggatt aacatatagt
tggtca atacaagcct ccagtggaag ctcttattt ggtttaattc catctccaga 1
acaagg caactctagg acctttacag tggcgatcgg cctccannac agcaaaatgc
tagagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag
aatag aattctggac ctttttaaa agtttttgga tgatataagc acaggaggca
aataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacggaggca
aataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt
3</pre>
```

ttttttttt ttttttca caagttatat tttattttaa cacgaggatt aacatatagt 60 tacaaggtca atacaagcct ccagtggaag ctctttattt ggtttaattc catctccaga 120 gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc 180 ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag 240 gttaaaatag aattctggac ctttttaaaa agtttttgga tgatataagc acaggaggca 300 gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt 360 tttgacgtcq tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct 420 ttgcgctgcg ctggttagac aagccgcagg cttatctcca cggtgagcag gataaaaacc 480 cccaaggaac agcccatgac aaccttctgt gcctttttat actttcccat cctacaaagg 540 aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcagggc 600 aggttctttt aaaattagtc atcttacaac acaacagtat tctagcacgg tggcgaagtg 660 acaggcggca gatacggggg aggaaggaga cgttcacggg aaattccaca ttctactcta 720 tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca gagtaaatga 780 tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc 840 atggagecae geagaetgge eeggaageaa caeeeaggtt caacatttaa gageaetege 900 tataacattc tttttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac 960 ggggggatac aagcatatcc tatactgggg gtgacggtca ttcaaagagc aaattactgc 1020 agcttatatc ttttccacta tgttgcaaga aatgaatcta tcctgaccca taatatgaaa 1080 gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat 1140 cctcgtggag tggagagtgg tccacttgac ttggtgaggt cagaagttcc tgaagatccc 1200 tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat 1260 gcacctgttg gtttgcaggg acagaggtgc ggccttgact cttctcaccc tqtqtcatcc 1320 gggcttgtct ttcgtctgtc aagtcagtcc tcctgcgtga ctgatgggtg caccacgctt 1380

```
aggtcacccg ttgcagggac cggaagtcca tggctctgcc gcaaccctga gcggtttgca
                                                                     1440
gtccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa
                                                                     1500
gccacttcct cttcacctgc ctgggcctca gcgtctctgc gcttgtggtt tctcgtcccc
                                                                     1560
gagggctgac tgagctgctc cggaagggtg gtgtgtggtc aaccttggtt ggctgagagg
                                                                     1620
agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccq
                                                                     1680
tccctgtccc tttggcttct ataggacttc cttgtcttag attcataaac agcaagaga
                                                                     1740
actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgccc
                                                                     1800
gacatcatcc ccaggettee gtggegetet eggteacagg agetttagge caatggttee
                                                                     1860
tettgaetgt ttttgeecea aatgagagga ggggetgett tgetttaagg egtggeggeg
                                                                     1920
gggggggggt ggtggccaca gattagggga cctcaggttt tcctcaaaaa cccacacagg
                                                                     1980
gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg
                                                                     2040
ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacgagagg cacggggtct
                                                                     2100
ttggtgatga aagtgctaac ctcggcgggg tgcggtagct cacacctgta atctcagcac
                                                                     2160
tttgggaggc tgaggcgggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa
                                                                     2220
cacggtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc
                                                                     2280
ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga
                                                                     2340
qqttgtagtg agccgagatc atgccactgc actccagtct gaacaataga gcgagactcc
                                                                     2400
cgtctcaaaa aaaaaa
                                                                     2416
```

```
<210> 3320
     <211> 5020
     <212> DNA
     <213> Homo sapiens
     <220>
    <221> misc feature
    <222> (5021)...(902)
     <223> similar to gi4589538 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3320
aatatcccat ggcttacctt ttatttttt attataaaaa cacatacaag agttttaaga
                                                                       60
aataacgaat ataagacaaa tcaaaaccat ggtgagttat taaacccatt ttctatatac
                                                                      120
aaatactaaa attcccaaag tggaatatca tccaatgtga gacacatcat agcacggtcc
                                                                      180
atatgtacac ggcacacaga gctctgcctg cgctcatctg tgaattgctc attacatgtc
                                                                      240
actgataaaa aaatctgcaa gggaacttct actcttcagt tctcctcttc ctgatgcatt
                                                                      300
gtcacatatt tttaaggaac tttagggata tgaagaaaat gcattaaagt gggtttctgc
                                                                      360
taagggctct gcatgttttg ctctgatcaa ttacgcacta catcttgaga aaaacttttg
                                                                      420
caactcattt ccagcaaaga tagcagaaaa ctctaggttt ttgccaattt atttttcct
                                                                      480
agtcactcat tggaacacaa gtccaacaac aacagctcag gaaccaaatc atgttttat
                                                                      540
attggtaagt tcattataaa atgccactca attttaaqaa gccactaaaa qqacactttc
                                                                      600
tqcagcaaaa aaagggctaa gttcaagttt ttgttgtttg acaaagacac aataatataa
                                                                      660
cccatatgtc acagatcaca acagcettaa gtgaaaegta ttagatttag ggaaaaaega
                                                                      720
ctatgcgact gcttgtttct cctgtctcct tgccaaacaa taaggagagc ctctqqtctq
                                                                      780
ttttatctat tttatgtctt tttgttttga aacctccctt tgtattctga aagctgatca
                                                                      840
aactatttgt gttcaaaatg tgtcaaggca cttctcaagc ctcagtggca tcccaggtca
                                                                      900
gccaagetee tetgtgetea gggeaetgae tteetetagg cagetgacaa tegeagaegg
                                                                      960
aacgcttttg gaggcctctc tccgccaagc ttccaggatc ttggaaattt ctgctggatt
                                                                     1020
gctgggactc aagtcacaaa gagcatacac ggctgctaac tgtatacccc atggtatatc
                                                                     1080
ttcatcgtga gcatgctgta taaacatacc aataaccgaa ctaatatttt tcacagcaga
                                                                     1140
```

tggaaatcct tctttcaaac ccaattggcc taaacgacca atcagcctca gtattgaggc 1200 tataataata tcaggagtat acgcaatgtt tgcatqtcct tttctqtatt ttatccattt 1260 atccatcaca ggccacagct ccttacttat gatgttatca tgcgtccaga tccatttctg 1320 atggcagcag agcagatcaa tggcaaatat gtattcccaa gtgttatcac ttaggtcttc 1380 accaaatttt tcactaggtt gaaattctgt ttttggacat aactgtatgg tcaaaagcag 1440 cttagaaacc atgaagccaa catctaccgg ggcattcttt tcccaattaa gaaaagctct 1500 caagcagttc agaacctctc ctttagcacg ttgcctggca actaactgca ttgctttatt 1560 aatcaccgat tgagagagaa atatatcatg ccacatgttt gcaataaaca aagttaattt 1620 ttcagactcc ggaaaatctt cttttaagta ggctgtagca aaacaaacga gctctttcca 1680 agtctccgag ttgccgacaa atacccacat acaccctgca gagggcgtga atgtaattgt 1740 ggtccataga tatcttctga atttttagtt ctgagagaat agagtgaagc aagcactctg 1800 ctaaatgctt ttttgttgtg ctaaattcat aaacaacttc cttctcttga tctctcatta 1860 cgggcttttt ggagatattt cccacataca catgactacg aatgacaggt aacagatcaa 1920 aagaaaactc tgcaattttc ttcagggcat tagctatggc tttatcatgg qactccacag 1980 tttcttttgg gcttaaaggc aactgtgaaa ctgcactgac ggctggacta gaacaacttc 2040 tttcctcatt tgttgttgca acttcagctg gagggaggtt ccctgggagg tttttgtgga 2100 ttccttctgc agtgactccc ctggtttctg gttctgggga cccagtgtcc aggcgcagtc 2160 ttttagcact tctcagtgta gacgttgaca gtgttctttt cccgcttgaa tcctgctgag 2220 tccccaaatc tcttgacttg tcttggttac agtcaccacc agagctgctc ccagttttga 2280 caaaagcagt tgctgctgaa gtgatcgttt tgaatcctat catagcactg gcaggtcccg 2340 gtaaattctt acagtcagca ggcggacctc gtgtgagttg aatattccct ttgaggatgt 2400 tgagggtccg ggccctggca gataactctg gatacatggt gtcaaggatt ttcacagaat 2460 tetectgagg ceeteceaca geagegtgge cagatgeaca gggtgggagt eggeeaggea 2520 caggaagtgc gtgcttcggc gtggccgcac agaactgcag aggagacggc actaccctct 2580 cactggctga agctgcagat ggagatggag aaggatctgg aggagaggca cgtctggggt 2640 cctctggcca tggagacatg gcaggaggca ctggggtttc acggaaggga gaaacctqqc 2700 caacaggaga ggctggtgag gaaggactag aactcgatat cagtggagac agtggctgtg 2760 aagtccttgg aggtgtagct atcagaggag caagcagagg cggcaaagga ggccccacct 2820 cttgccgtat tttactcagt gtgtcaggag aacaatctgt aggagtggat gtatcagcat 2880 ttgctaaaat ggtctgagtt tggcttcttt gagtttttgt attagctttt tcccctgaaa 2940 atgactgage aactteacte tgatgagttt caactetget egaegetgaa gtttttaetg 3000 gtttgtttga ctgatctttg tttgaaatct ttgatcgatt cttatttttg ccagatggct 3060 ctagttttga gttataatat gtgtgatcag acgcaacaat ctgagtctcg aagttttgat 3120 catagatttg agaactaatc catatactag gcttaacggg tctatttcgc aaacgactct 3180 tatcaaagtt ggtgctctga ccactgcttg aaacatcctc ttggggacat gaaagattat 3240 tgccacatgg agcctcctga aatgcagggc cagtgtgact ggcctctggg gacttctcag 3300 cagaagtcac tgggatgcaa ccagcttcca gctctccttg atcctgagaa atagggatgt 3360 ctccaggaat gtcacacagt gtgacctggt ccacatgtgg caagacagct acaccactga 3420 tgattgtcca gttgtccccc ttttcaatga ctagattctg atccttattt ataagtacgt 3480 ttataacttc tgaggtcact gttgctatct gacactgaaa tgttgtttcg gcctcgcagt 3540 tagaactttg ctctatggat ggctccatca cagagtcaga gcacaaggct gatggctcca 3600 caggitetgg caggitetet tececaccat eggittgeet geetgeatet gaaegggeet 3660 ctggtctgct ctgagggttt tcattctgag gcataccgct gatgggagag ctgccctcag 3720 tgtccaaggc agctgcttgt ggggttggtt ctgaagcatg tgatgaggag ccagtcgttt 3780 cccgaaatgg acttttctct tttaaattct cagtggtcat gttgttattt acatttaaga 3840 gcaataaact gccagtatct ttaccattgc aatcttcaga atttgtttga agttcttgcc 3900 taatcttggt cagaacctca gacagagttt ccaaagaaca ctgagtgagc tgacttgtat 3960 tttttaacga ataatcatct tcctctgatt caatccactc ttcacaggtt ccaagtgttt 4020 cttcctcaca gggttgcttt ctgtattttt ctcctatttc acttgccttt aattctttgt 4080 tcatttcttt acttagggtt cctttactag aacattcaga aacagagtcc cctgaactat 4140 aatcccctaa ctgacagctc tcaagaaaca tcacaacctc tgatgtggaa agtctatcca 4200 gctcagaaaa agtacttatg ttaaaatctt gcagagctga cgtcaaataa cctacctcta 4260 aggaaggtet cacctegget acageageat etgtgtetee taaattttte tgtgagteat 4320 caggagcatc ttgctgttcg ctcccctcac tgcagctaaa tgcctcactc tctacctcag 4380 tgtcgtctcc cccctctcga atgcctgtgt aacaatgtaa ggtaccaggc aggctacttt 4440 gggaggtatc ctgtgtctct ccatgttttc tgcaaaatgc tgaagaaaaa gtagtgtctg 4500 tggtgccaaa acactcaggc aaagcaccac cgggagttgt agatttcaat ttccaaagtc 4560

```
cattagcatt ttgtggtgtg ctggtagaat catttgcaac agccagggcc tcaccaccag
                                                                     4620
atctccctgt gtctccacag ctggtttctt caacagaaaa ccctcctgac acagtcactt
                                                                     4680
ctgtggctgg aagcatctca ctgccatgtg tcccactgga gtccagatct gtggcctgag
                                                                     4740
getgeetttg ettetgeeca tetecetgea etgeagette teteacaatg tettggtttt
                                                                     4800
ggatgaggat attttcagga gagaaagata atctgctatt tgtggaacaa tcagaatttt
                                                                     4860
ctactggtga agaaccacct ggagaattaa aatctaattt tctcctagag gcagaaactt
                                                                     4920
ctggtgaaat gcttttcaca gcagccacct ccgtgatgtt ttgtgttgta tcatctcttt
                                                                     4980
ccccatcaca ttttgctata gttgacatac cggttttgtt
                                                                     5020
```

```
<210> 3321
<211> 1540
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1495)...(959)
<223> similar to gi929619 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3321 60 tatgtcttca ctcactgttg cccatttcca ttttcttaaa cttttttgaa acaaaaaata 120 aaatcacaaa gttcaattca acatgcagat ttcaaagaaa agggagcttt ctagaaactg 180 agctgaaggg gtactgtggg ggatgggtac tgttgtcaga acctcaaatt cttgctgggg 240 cagtttgtga caagaggcag ggatgctgga atgacaggta gaggtgagaa caaagctgcg 300 tgtgtgcaga tgtgtgtgct gagggcaggg gatggggacg gcggccacaa agggctgtca 360 gcagctaggg tgcccgtgag aggtaggacc acctcaggca tgggcagagc tggcaggaca 420 gcaagaaatc tagacggact ctctgccctt gtgtggagaa aagcccttcc cttccctcca 480 atgtetetae eeagteetee aacageagee tacagggeee eeagteetag gggaaagtee 540 gggagtctac agtctccgtt caagttcaag taacctgagg cacgctctct tctagaaggt 600 geetteeaca tetetetett etegeagaag etgeeageag eteeqteeag agattetgga 660 gcagagactg ctgcctggag gtcacagatg aatcttgggg tggccgatgc tccagccaac 720 ttggggtgca aaaaagacat gagcgctcct cttctcggga gcaagtagac acaggtgcca 780 gggtcaggaa gatgatgcta cagccccaag tcctacgcca gccttccagc ccggaaggct 840 catgtgtgca ggctcttgac cccagtgctt gcccttaccc cagcaacgcg gcgcggccag 900 aaccagaatg caataaatag aggcagggcc aggaggcgga gggccgggat ggtgctagct 960 1020 acctgagtet teetetteet caacgaeetg tgtetetagt ggaaetggtt etteettggt 1080 gagggtagga ggttcatcag caacttccga ggagggcagg gagggctcct ccaggatctc 1140 ctggcccagc gttgggggct gggagtcatc cgtgcggaag tcggaggtgt gtgctgggct 1200 cagggactca ctctgctggg ggctggggct tgagttggtg ctgctgtcca ccttaagctg 1260 atagacgtca gacacggaac tctggttgct gttttcgtcc tggaattcaa gaaggagaga 1320 ggaattggct gaggcatcag aaggaaagcc attaggttct cgggctgctg aactgttcga 1380 ttttgacttt tctttctcct tgctgtctgt cacaggaacc cacttaaata tcctcaggga 1440 cgtgtcaccc acagtcaccc acttcttctc cccaacttca acgcctgaat acgcagagcg 1500 ctcagcctgg cgaactgaca ccactccagg gctactcgct 1540

<220>

```
<210> 3322
     <211> 1421
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1401)...(393)
    <223> similar to gi214868 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3322
ttttttttt ttggaaatat attattcatc tattttatat taacttttaa ttttttaatt
                                                                     60
aaatttttaa tagaatatto agggaggggt tottocaagg tqocactoaa acaaaatcoa
                                                                    120
agcaggttca tcataagacg aaaaaggtac actctcagat tggtttaaac ctcctaactt
                                                                    180
aaaggacaag gaaggatctg gtttttgtct tttggaaacc catgagctat ctacttgttc
                                                                    240
tttacttcag ccaattagaa gttcaactga agatagctat tgaacatcat cttaatgatg
                                                                    300
ttataaacag gcaatttaaa tattttattt tgcataatcc ccaagctggg ttatcacaga
                                                                    360
gaaagcatct gagcttctcc cagctcgcca acctgcctgg cattccgtag ctactagcca
                                                                    420
gtcctgtttt ctttccacaa agaaaacaat gatttgttgt tttcttcttt gtctggaaga
                                                                    480
ggggcttttc acaggtggga ggtgatgagt agtacattct ccaaaaaaac tcctgtatgt
                                                                    540
tctaactggg gagaacattt tcctaaagtt ttcttccatg aaaatgctgg aggtttgtag
                                                                    600
acagcccagt tccagagttc tgaagcctgc ctgccccacg tgtgctctgt aatctatttc
                                                                    660
tgcttgtgct cccggccagt gaggcaagaa aactgatatt atttacacaa ccaacaggct
                                                                    720
ctttgggaag ccttgttagt catttctgtg atatcccgag cctcaacttt ggaaataaca
                                                                    780
tcagatcttt tcccaagtga atcaacttta acaccttgaa agcaagtagt cctagagaaa
                                                                    840
gaagaatcag ttatgttttg aacatccagt gactgagaag aagaaggctg tagcttccca
                                                                    900
aactcaaaac atttggactg tctctctggt ttcaccagag aattatgtag cgacattggt
                                                                    960
gcagaacagc gaagaggtga caagagtcta ttcttgtgag gacttaattc ccggtagtta
                                                                   1020
agaactgaag tetetaetga tteeceatte ageacteetg caacatgett gagatgetge
                                                                   1080
tctggagctt tcaacccttt gtcagcatta gtgagtagca actccagatt cactttgcac
                                                                   1140
gcaccttcta agccgctgct ctgttcatca gcatttcctt ctgcaaatga agccagtgag
                                                                   1200
cccactttag gtagaagtga ttgttcggtt acacattctt ctgaaggtaa gacaatgttc
                                                                   1260
1320
agatggagaa cagagtcagc aagctcctgg tcatttccca actccaaatg gggtatctga
                                                                   1380
ggaggtagtt tgacgttgct actgaagtga gacagtgtgt c
                                                                   1421
    <210> 3323
    <211> 2351
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(2352)
    <223> n = a,t,c or g
```

```
<221> misc_feature
<222> (2)...(1461)
<223> similar to gi5708210 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3323 aatggcctct gctgcctctg tgaccagcct ggcagatgaa gtcaactgcc cccatctgtc 60 agggtaccct gaaggaagcc gggtcactat cgaactgcgg cccaaaaact tctqccqqqc 120 ctgccttacc ccgctactgt gagataccca ggcccagacc ctggaggagt ccccctactt 180 gccccactct gcaaagaacc cttccgtccc tgggagcttc cggcccaact ggcagctqgc 240 taacgtggtg gagaacattg agcgcctcca gctggtgtcc acactgggtt tgggagagga 300 ggatgtctgc caagagcacg gagagaagat ctacttcttc tgtgaggatg atgagatgca 360 gttgtgcgtg gtgtgccggg aggctgggga gcacgctacc cacaccatgc gcttcctqqa 420 ggatgcagcg ggctccctat agggaacaaa tccataagtg tcttaaatgt ctaataaaag 480 agagagagga gattcaagaa atccagtcaa gagaaaataa aaggatgcaa gtcctcctga 540 ctcaggtgtc caccaagaga caacaggtga tttctgagtt cgcacacctg aggaagtttc 600 tagaggaaca gcagagcatc ctcttagcac aattggagag ccaggatggg gacatcttga 660 ggcaacggga tgaatttgat ttgctggttg ctggggagat ctgccgqttt agtqctctta 720 ttgaagaact ggaggagaag aatgagaggc cagcaaggga gctcctgacg gacatcagaa 780 gcactctaat aagatgtgaa accagaaagt gccggaaacc ggtggctgtg tcgccagagc 840 tgggccagag gattcgggac tttccccagc aggccctccc gctgcagagg gagatgaaga 900 tgtttctgga aaaactatgc tttgagttgg actatgagcc agctcacatt tctctagacc 960 ctcagacttc ccaccccaag ctcctcttgt ccgaggacca ccagcgagct cagttctcct 1020 acaaatggca gaactcacca gacaaccccc aacgttttga ccgggccacc tgtgttctgg 1080 cccacactgg catcacaggg gggagacaca cgtgggtggt gagtataqac ctqqcccatq 1140 ggggcagctg caccgtgggc gtggtgagcg aagatgtgca gcggaagggg gagcttcggc 1200 tgcggccaga ggaggggtg tgggctgtga ggctggcttg gggcttcgtc tcggctctgg 1260 gctccttccc ccacacggct gaccctgaag gagcagcccc ggcaggtgag ggtgtctctt 1320 gactatgagg tgggctgggt gaccttcacc aacgctgtca cccgagagcc catctacacc 1380 ttcactgcct ccttcactag gaaggtcatt cccttctttg ggctctgggg ccgaqggtcc 1440 agtttctccc tgagctcctg agaaggagca gttacctact ctcctctaag tacaggactc 1500 atatcaaccc aagtaccatg tggacttgat ccctggctga atcacctgga tgacttggaa 1560 tagaaatgac tgctttagaa gatgggatgg ggccgggtgg taaggggatag aagagaggac 1620 tctcaatcta ctgatcaagt cctttcccca atgcccagtg gatggccagg gtacctqqqq 1680 actcaggetg etgecagtte tgeteaceae cateegtget tggcacagaa gtagetgeat 1740 agaaagagca ctggatttga agtcagaaga cctgggttct tgaaccagcc tgtcaaccag 1800 ttgtatgact ttaaacaagg catctcacct cttttcatct tgttttcttc caataatgtt 1860 agagttcatg taatcacatt ctctagaacc atttagtttg tgttaactat gaaccaagca 1920 gtgtggtggc cactggtgac ttgaaaatat agagaaaaaa aaaacctgct ctatatctga 1980 aagagctctt gggaagacag agaaacataa agaggaaatt acagcacagt gtggtgggtg 2040 ttacgggaag tccaacccca gcattatggg agtttaggga aaggggcata gcccagcctg 2100 gaaggagagg gtgagtgggg gatggctttc tgaaaagggt ggtctaaagg atgcctatgg 2160 tcaatagggg aaagaggggg agaagcatct taagaagagg aaacagcaga qnactggctg 2220 gatgacetgt gaetttggag caetgggttg tetecattgt cattatggge agatgtgtge 2280 catccccage egacgecact caetgeetet tteeteetgg tgttgccact tetgggtgag 2340 attaaggtgc a 2351

<210> 3324

<211> 1828

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1506)...(248)

<223> similar to gi3873743 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3324 aaaaactcaa gaccaccaaa tggcgtcttt atttacatat tagagcgggt cagccaagga 60 aaatcctgca caaatccttg tattacagtt gcatctccct cttcctcaga cttgccatgc 120 ttcctctttc ctcttgctac agagcctgtt gcacatctct tccctctccc ctttgccgag 180 ttagtctctg cttatccttc tggatctccg tttaagaatc acctccgaga agccttccct 240 ggggccttcc cgtgtggctt gtggctcaat catgatgttg ataagagaag gtttagttgt 300 gtctgcctag gctctgcctc agggattttt ggagttcttc tggtgtttgt acaaaatacc 360 ctttgcctcc aaatgcagtc atgacttgct cataatgtga atttggcagc aaacacattg 420 gagggaccac tgcagtagca tcttgaaatt ttaacatttc tttccaagta tctgtatcaa 480 aaccttggta aattccattg ttattcacta ccaacagtat gattggcaag ttgtacctgc 540 agatggtttc tacctccatg ccagaaaacc caaatgcact gtctccttcc acacagatga 600 tccattgccc agggcttcta tctttagcca ccacggcagc tgcaatagca aatcccaaac 660 caactcccat tgttccgaaa gtaccagcat caagcctgtg acgaggaagg tagttctgaa 720 gcacagtccg tccaatgtcc atagtatttg ctccttcact taccacgaaa cagtctctag 780 gtagttgttc ttgaacatgg tagaatactg tgtaataatt cataggcagg gatttttag 840 aagctagttc cttggatgca gcttcattgc tcttcatttt ttctctcaga gttttccacc 900 acttgctctc tggaggatac tgccatggtg ttttatcaag ttcctctaaa agctgcttag 960 tgacagcatg tatgtttcct agcaaagtaa cagcgggctt tacattattc cccaattctt 1020 ctgcacagat atcaacctaa aaaagagaca aggctggata aacttcacat ctggctgata 1080 tcttggaggc agtccaaaat gtaaaatcca atttagtctg gcaccaaata acacaattac 1140 atcagcaaat tgcaaagccc tggatctggc tgcacctaca cagtatggat ggttgtcagg 1200 gacaacaccc ttccccatag gggtgggcaa aaatggcagt ttatattgct ccaccaattt 1260 cttgatactc tcttctgcat gagcgtaagc agcacctttc ccgatgataa gaaggggttg 1320 tttggcattc ctaataacag aagccgccgt gcacacagca gaggtttctg ccatgctaat 1380 aggaggtgac atgcagcgtt ccatgtactt tatagaattc acattcacct gaaggttcac 1440 aaaatctgct ggtatgtcaa catagcaagc acctggacga ccatagatac tgcttctcac 1500 tgcctacgtt cattacaagt agaagaaaag atttgtaaaa tctcagtctt atcatattct 1560 actcaaagat aatttaaaac tggaaaatga acacttttca tttttctqqa catccttqtq 1620 gagaaaaaaa taattatgat gaaaatcgaa atgtcctcta ttgactacat ttttaaagat 1680 tttttgttta aaagggagag agataagaaa gtattcattt agggctttaa aattcatgtt 1740 ctattacact ttagcttggg aaattattca cccggctctg cctgccaagt ttttgcactg 1800 taatatgtac tttcatctgc ttcctaat 1828

```
<210> 3325
<211> 832
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (609)...(417)
<223> similar to gi3510234 in the genepept database release 114,
```

```
<400> 3325
tccttctatg cttattcgga ggggcggcaa ggcatgtttc ccagttttta agatcttgcc
                                                                       60
ccccccata atttatgagg accgttctgt gtccqqqcat caqtqatqqt qcccctqcat
                                                                      120
ttcggggtgc tctttggagg gcgtgtttgt tgaaaaacca cccccaaccc cctqcccqcc
                                                                      180
ggtcccggac ctggccacca tggaaggtgc tgcggatggt ggatccgcgt gccaggcggc
                                                                     240
tecgeteece tgatgggggt gecaggetgt gactggaggg ggaggeaggg ggcaeceqtg
                                                                      300
gggtgcctga gctgttttct ttcccatttg gcaacagtga cgggcgctca gcccccgggc
                                                                      360
gttctgtgca aacgtaggtg ttcctgcggg tcatcatgct aggagggagg ttgttggggg
                                                                      420
tgctcgtgct gtccttccgc cgctctggga tctctgcctt gttggggttg tgggcgctgc
                                                                      480
tgaccatggg gctgaagggg gggcagccct cgactcccac tccccgcggt gctgcagctc
                                                                      540
geetteegge etggeageeg etecteette ageteegeet eeeeegtget egtegggetg
                                                                      600
cgtttggggt gcaggggtgc aggggatggg ccacctgggg gagggggtac cgtttagagc
                                                                     660
tggcatcacc acggaaaccc agaactgact ctqqqqqatc qttqqaacct qagaattcct
                                                                     720
cacgtgggtt gcaatctctg tgtgggccat tctgacaata tctgtcaaaa ttacctcaag
                                                                     780
attaccaacg cacatatact gacttagaaa ctccaaatca atgacatcat gc
                                                                     832
```

```
<210> 3326
<211> 5866
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5867)...(3480)
<223> similar to gi4098628 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3326
60
ataaacacaa aaaagcaaat atcaactgaa aggtttggtt gggtagtcaa ctaattttgt
                                                                  120
tcttttctag ggcaattcaa gaaggtaaca tttgaaaggt ttctaaatga tgcacactgt
                                                                  180
aatcattcat totttttaa aatacaacac aaaccaacag ctacaatgot ttttattttt
                                                                  240
aacaaaaagg atgtaaggag ggtaagaaaa acagaggaca gtaagatagg atgtaaagtg
                                                                  300
tgatgtatet etggacacca tecetetetg cetgeeccae acceaaaagt tttaaataat
                                                                  360
ttaaaggata ccaattacag taccagaaca ccatcaaaat aattgtcttt atcagggtca
                                                                  420
aaaaatacag tgattatgaa tgagctgtga ccagttacga aattttactg gaaatgttta
                                                                  480
actgtggtca gcagtccaat ggtgtgcaca gtgccttcaa ttaatgcact tgagcatacg
                                                                  540
taattacatt totggcaggg tocacacoco ocaagaaaag gtaaagotaa qoatttoatt
                                                                  600
tctacattct aaactctgga atcacagagc ccagtttaaa agaaaagtca cagtggataa
                                                                  660
gagatgtata taaaaaatac aaggtgtttt tttcaaatca ggagttgtgg qactaccatt
                                                                  720
ctttttttt tttttctttc ttttcttaca aaatgcgatt ttagaaaagg atagagactc
                                                                  780
cagttcatgt tatactacag acttagacag tgaataagta tattgcatgt tttggtagtc
                                                                  840
agtetteagg etteetttea ttteecetag eeceaggttt etttagggta aageatgtga
                                                                  900
gtcctgaata aagatacaaa aatgcatttg cagctctttt cttgaattct gcagacttca
                                                                  960
aagcctgcaa gtcatatatt ccatcatcaa tgaccacaat ttttctttag ctttgtacac
                                                                 1020
```

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ctattcttgt ataacaacag tgcatggcac aaatgtacaa gaaaataact ggttttagtc
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tctacagttt ctatatggag taaaataagt taaaactttt ctaatgagaa tagctgacag
                                                                     1140
gcagcataca totttatttt acattttaaa gtototgcag gcatctactt tggttagtta
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tcaacaatca taacataagc actgatcaga gaactgagca gcattccaat aacgttaaca
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gatatattat ttctttttga aatactggga aagcccagtt ttaaaaatatt attaaaatgt
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tctaacattt acatactatg aagagttaga tctaataaaa taacatttct tcaaaaataa
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caaaaaacaa aaaacccaa accettatee cacatactga aaaatcaatg gtttttgcaa
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caaatgtcct cttacaatca tctagccact gctcagcggc ttctcttttc acattgtatg
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                                                                     4260
gcaactcctt agaaacatta ttaaaaattt tagtgaagga tatttcagga gaacctgtat
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ctcctccata ggtcttgggg atatcactgg gtacgacaag actcgcagag cgtgacacca
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ccagctttaa tatgttaagg gcttccttcc agtaaggact ctgtacatat ttgccaataa
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```

```
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                                                                     4560
gctctgcaag ataagtcaca agattaaatg ttgtatctga gaaggagtca tgcaggtatc
                                                                     4620
tgcacacgac attgatccag ttagaacagt ctctggaata cgtgtgtgta ctgtacaaac
                                                                     4680
tcatcatgtg tgccagattg acaagtgttg ggcatttttc ttctgcacaa acctttgcta
                                                                     4740
ttcgactagc tgtttctttg caaaactgag ttgggctgtc aaaatgctgg attaagtgag
                                                                     4800
gcaataagca aaggatgtta agaggaaagc ctgacaattg ggaaggatcc accaatgtat
                                                                     4860
gtttggagac agaaatgagt ttactgagga ggtgcacqgt catttcttqt qtaqatqctq
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aggtaaaacc cttaaggaag agctgctgaa qtcctqqaaa attaqtccat ttcaatttgc
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tttgtacatt ttcaatcttc tctcgactct ctgatttatc caaaggcaaa tggataagca
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gtttgttgag aagcctgaga gccaggaggt attcatattc ataatctgat tctaataaag
                                                                     5100
atgctgctat ccaaaaaatg gtggccatca agttggtagg ctcagtagtg gactgcacgt
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catacattcc tttctcttt aqagaggaaa qqcttctagt ccttgctaaa ctactqctat
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caccaatcaa acttaatctc aaagagttac ttcttgcatt actgttatat cccaaataac
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gaacatcaga aagtgtagtt gcagtgagag gctgctttag ggccctgaaa atctgaaaqq
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atctcccagc atagtgtcga gaagaacagg aaagtgctgt ttgcagagca acttcactaa
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tcaaaaatgt agttaactgt tcagcactct ttatgctagg attcttggca gaaacatcct
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catggttcca aaggggccct ctttttcttg aggtaatgaa ttccat
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```

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<210> 3327
<211> 6086
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(3488)
<223> similar to gi3043606 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
ggctggcaat gacaacttct attagtttgc aagaggcatt tgataaactg aatccttgtc
                                                                      180
ctgctggaat tatagatcag ctgagtgtga ttcccaatag taatgaacct cttaaagtaa
                                                                      240
ctqcaagtqt qtacatacca gcacatggac gacttgtttg tggtcgtgaa gatggaagca
                                                                      300
tagttattgt acctgccaca cagacggcca tagtacagct gttgcaaggg gaacacatgc
                                                                      360
tcagaagagg ttggccacct cacagaacac tccgtggtca tcggaacaaa gtcacatgtt
                                                                      420
tgctatatcc tcatcaggtc tcagctcggt atgatcaaag atacctgata tctggaggtg
                                                                      480
tggatttttc agtcataatt tgggacatat tttctggaga aatgaaacat atcttctgtg
                                                                      540
ttcatggtgg tgagattact caacttctag ttccacctga aaactgtagt gcaagagtac
                                                                      600
agcactgcat ctgctctgta gccagtgacc actcagtagg acttctaagt ttgcgagaga
                                                                      660
aaaaatgcat aatgttggca tctcgtcacc tttttcctat tcaagtaatc aaatggaggc
                                                                      720
cttctgatga ttacctggtg gtggggtgtt cagatggttc tgtgtacgtc tggcaaatgg
                                                                      780
```

```
atactggtgc attggatcgt tgtgtgatgg ggataacagc agttgagatt ctaaacgctt
                                                                      840
gtgatgaagc tgttcctgct gctgttgatt cacttagtca tccagcagtc aacctaaaac
                                                                      900
aagctatgac gagacgtagt cttgctgctc ttaaaaaatat ggcccatcat aagctacaaa
                                                                      960
cccttgcaac taacctcttg gcttctgagg catctgacaa gggaaattta cctaaatatt
                                                                     1020
ctcataactc cctgatggtt caagcaataa agacaaacct aacagacccg gacatacatg
                                                                     1080
tgctattctt tgatgtggaa gcgttgatta ttcaactcct gactgaagaa gcctctaggc
                                                                     1140
cgaatactgc tcttatttcc ccagagaatt tgcaaaaagc atctggcagt tcagacaaag
                                                                     1200
ggggctcttt tttaactgga aaacgagcag cagttctctt ccaacaagtg aaagaaacga
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tcaaagagaa catcaaggaa cacctccttg atgatgaaga ggaggatgag gagataatga
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ggcagagaag ggaagaaagt gatcctgaat atcggtccag caaatcaaag ccattgaccc
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tattagaata taatttaact atggacactg caaagctgtt tatgtcctgc cttcacgcct
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actgcaccgt atcgtttggc ctcttgtcaa gaggaggcca tatgtcactg atgctgccgg
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gttataatca gcctgcttgt aaactgtcac atgggaaaac agaagtagga aggaagctgc
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cagcgtctga gggagtagga aagggaactt acggagtgtc ccgtgccgtc accacacagc
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atctcctgtc tatcatttct ttggcaaata ctttaatgag tatgaccaat gcaactttta
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ttggtgatca tatgaagaag ggtcctacca ggccacctag accaagcacc ccagaccttt
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tgcactgtgt tatgctgcca gacctactgg gattggataa atttaggcct ccccttctgg
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agatgctggc ccgaagatgg caagatcgat gcttggaggt gagagaagcc gcacaggccc
                                                                     2100
tgcttctggc ggaactgaga agaattgagc aggcaggcag gaaggaagcc attgatgcct
                                                                     2160
gggctcctta cttacctcag tacatagacc acgtcatatc acctggagtc acatcagaag
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ccgcgcagac tatcaccacg gctcctgatg cctcagggcc tgaagcaaaa gtccaggagg
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aagagcatga ccttgttgac gatgacatca ccactggttg cttatcaagt gtcccacaaa
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cgctggccag acatacttgc aaggcactga cgtttcttct gctacagcct ccaagcccca
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aactteetee acacageact ateegaagaa cageeattga tetgattgga egtgggttea
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gacteggeec getetgegag geatgeecte tegeteattg ceaeegeeag accaeegee
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gacatcatta tgtactgcct tgaaggatct ttagttaaaa agaaaggtct tcaagaatgt
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caacagctaa ccaatttgag attcatgatt aattatgtac acaaaaatat tttccttgta
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gaaaatagtt ttccagacac ttagccttct gaagtgctca tctcttgctt aaatgatagt
                                                                     4200
```

```
ctatttagta gtttaaaata aaaataatca ctccctatga tctagttaat gtaattatcc
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tttttttaat gatttccctt tatagacttt atgtgggctg aatggtcctg tgtacatatg
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```

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<210> 3328
<211> 2698
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(792)
<223> similar to gi3885470 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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acttggaaaa agaggacctc tcagaagact cacaatctag catgattaag catgtcgctt 180
ggctaatctt caccaattgc atcttttct gccctgtggg cgttttttc atttggcacc 240
attgatccac tggcaatctc ttatcaggcc ccggaaataa tggaagtctg ttactctgat 300
```

```
attttttcca ttgcctgctt gcctgaatcc agtcctgtat gttttcttca acccaaagtt
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ttccatcagt agccaaggag gttgtctgga acaggatttc tactacgact gtggcatgta
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ctcacatttg cagggcaacc tgactgtttg cgactgctgc gaatcgtttc ttttaacaaa
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gccagtatca tgcaaacact tgataaaatc acacagctgt cctgcattgg cagtggcttc
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ttgccaaaga cctgagggct actggtccga ctgtggcaca cagtcggccc actctgatta
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tgcagatgaa gaagatteet ttgteteaga eagttetgae eaggtgeagg eetgtggaeg
                                                                      720
agcctgcttc taccagagta gaggattccc tttggtgcgc tatgcttaca atctaccaag
                                                                      780
agttaaagac tgaactactg tgtgtgtaac cgtttccccc gtcaaccaaa atcagtgttt
                                                                      840
atagagtgaa ccctattctc atctttcatc tgggaagcac ttctgtaatc actgcctggg
                                                                      900
gtcacttaga agaaggagag gtggcagttt atttctcaaa ccagtcattt tcaaagaaca
                                                                      960
ggtgcctaaa ttataaattg gtgaaaaatg caatgtccaa gcaatgtatg atctgtttga
                                                                     1020
aacaaatata tgacttgaaa aggatcttag gtgtagtaga gcaatataat gttagttttt
                                                                     1080
tctgatccat aagaagcaaa tttataccta tttgtgtatt aagcacaaga taaagaacag
                                                                     1140
ctgttaatat tttttaaaaa tctattttaa aatgtgattt tctataactg aagaaaatat
                                                                     1200
cttgctaatt ttacctaatg tttcatcctt aatctcagga caacttactg cagggccaaa
                                                                     1260
aaagggactg tcccagctag aactgtgaga gtatacatag gcattacttt attatgtttt
                                                                     1320
cacttgccat ccttgacata agagaactat aaattttgtt taagcaattt ataaatctaa
                                                                     1380
aacctgaaga tgtttttaaa acaatattaa cagctgttag gttaaaaaaa tagctggaca
                                                                     1440
tttgttttca gtcattatac attgctttgg tccaatcagt aattttttct taagtgtttt
                                                                     1500
gtgattacac tactagaaaa aaagtaaaag gctaattgct gtgtgggttt agtcgatttg
                                                                     1560
gctaaactac taactaatgt gggggtttaa tagtatctga gggatttggt gqcttcatgt
                                                                     1620
aatgttctca ttaatgaata cttcctaata tcgttggctc tactaatatt ttccaatttg
                                                                     1680
ctgggatgtc acctagcaat agtttggatt atatagaaag taaactgtgg tcaatacttg
                                                                     1740
catttaatta gacgaaacgg ggagtaatta tgacacgaag tacttatgtt tatttcttag
                                                                     1800
tgagctggat tatcttgaac ctgtgctatt aaatggaaat ttccatacat cttccccata
                                                                     1860
ctatttttta taaaagagcc tattcaatag ctcagaggtt gaactctggt taaacaagat
                                                                     1920
aatatgttat taataaaaat agaagaagaa agaataaagc ttagtcctgt gtctttaaaa
                                                                     1980
attaaaaatt ttacttgatt cccatctatg ggctttagac ctattactgg gtggagtctt
                                                                     2040
aaagttataa ttgttcaata tgttttttga acagtgtgct aaatcaatag caaacccact
                                                                     2100
gccatattag ttattctgaa tatactaaaa aaatccagct agattgcagt ttaataatta
                                                                     2160
aactgtacat actgtgcata taatgaattt ttatcttatg taaattattt ttagaacaca
                                                                     2220
agttgggaaa tgtggcttct gttcatttcg tttaattaaa gctacctcct aaactatagt
                                                                     2280
ggctgccagt agcagactgt taaattgtgg tttatatact ttttgcattg taaatagtct
                                                                     2340
ttgttgtaca ttgtcagtgt aataaaaaca gaatctttgt atatcaaaat catgtagttt
                                                                     2400
gtataaaatg tgggaaggat ttatttacag tgtgttgtaa ttttgtaagg ccaactattt
                                                                     2460
acaagtttta aaaattgcta tcatgtatat ttacacatct gataaatatt aaatcataac
                                                                     2520
ttggtaagaa actcctaatt aaaaggtttt ttccaaaatt caggttattg aaaacttttc
                                                                     2580
attttattca tttaaaaact agaataacag atatataaaa gtgttaatct ttgtgctata
                                                                     2640
tggtatgaaa tacaatattg tactcagtgt tttgaattat taaagtttct agaaagca
                                                                     2698
```

```
<210> 3329
<211> 645
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (471)...(299)
<223> similar to gi4567200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3329
ttttttttt ttgcactgcc acatagattt taatttgcct aaagatgata gcgattttga
                                                                       60
gctgtggtta gggataactg ttcccacagt agacctatta ccaacatgag ttgctggctt
                                                                      120
tcatttaata ggactccaag ctggcaaaca aaccccacca tcttcccaac agccacatca
                                                                      180
tgagatctag cagcaccagc ctcttgaagt ggcttctcag tggaaggttt gctccgtttc
                                                                      240
agtgaagctt ctctctcaaa gctctgacgt caccagggtg cccctcgagg gtctggatag
                                                                      300
actgtccgaa aggtcaggtt cactctcggt tctctagagt ggtattcttt gggcactcga
                                                                      360
tgctgccagt cagettgtgt cgctccttcc atgattaaca aggtcccatg atccaagggt
                                                                      420
atcttcactc tttccacata tgtgtagtct ccattctctt cctagaaaac agcatttgtt
                                                                      480
gtaataaatg ttttgcctgt gtaatcaaga tgcaacagaa cctgacagag gtcaaaaaaa
                                                                      540
aatggaaacc tctgctcagc cagactgtgg gaatccatat atagctctgt catttggcag
                                                                      600
ctgcttgact gttggcaagt tacctcatct ctctgtaccc tgact
                                                                      645
```

```
<210> 3330
<211> 2149
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2151)
<223> similar to gi2224675 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3330 gctttgtttg atggtgatcc acatttatcc acagagaatc ctgccttggt tcctgatgct 60 ttgctagcct cagacacttg tctggatata agcgaagctg cctttgacca cagtttcagc 120 gatgcctcag gtctcaacac atccacggga acaatagatg acatgagtaa actgacatta 180 tccgaaggcc atccggaaac gccagttgat ggggacctag ggaagcaaga tatctgctca 240 tctgaagcct cgtggggtga ttttgaatat gatgtaatgg gccagaatat cgatgaagat 300 ttactgagag agcctgaaca cttcctgtat ggtggtgacc ctcctttgga ggaagattct 360 ctgaagcagt cgctggcacc gtacacacct ccctttgatt tgtcttatct cacagaacct 420 gcccagagtg ctgaaacaat agaggaagct gggtctccag aaggatgaat ctctgggatg 480 cagagcagca gagatagtgc tttctgcact tcctgatcga agaagtgaag gaaaccaggc 540 tgagaccaaa aacagactgc ctggatccca gctggctgtg ctgcatattc gtgaagaccc 600 tgagtccgtt tatttgccgg taggagcagg ctccaacatt ttgtctccat caaacgttga 660 ctgggaagta gaaacagata attctgattt accagcaggt ggagacatag gaccaccaaa 720 tggtgccagc aaggaaatac cagaattgga agaagaaaaa acaattccta ccaaagagcc 780 tgagcagata aaatcagaat acaaggaaga aagatgcaca gagaagaatg aagatcgtca 840 tgcactacac atggattaca tacttgtaaa ccgtgaagaa aattcacact caaagccaga 900 gacctgtgaa gaaagagaaa gcatagctga attagaattg tatgtaggtt ccaaagaaac 960 agggctgcag ggaactcagt tagcaagctt cccagacaca tgtcagccag cctccttaaa 1020 tgaaagaaaa ggtctctctg cagagaaaat gtcttctaaa agcgatacga gatcatcttt 1080 tgaaagccct gcacaagacc agagttggat gttcttgggc catagtgagg ttggtgatcc 1140 atcactggat gccagggact cagggcctgg gtggtctggc aagactgtgg agccgttctc 1200 tgaactcggc ttgggtgagg gtccccagct gcagattctg gaagaaatga agcctctaga 1260 atctttagca ctagaggaag cctctggtcc agtcagccaa tcacagaaga gtaagagccg 1320 aggcagggct ggcccggatg cagttaccca tgacagtgaa tgggaaatgc tttcaccaca 1380

```
gcctgttcag aaaaacatga tctctgacac ggaaatggag gaggagacag agttccttga
                                                                     1440
gctcggaacc aggatatcaa gaccaaatgg actactgtca gaggatgtag gaatggacat
                                                                     1500
cccctttgaa gagggcgtgc tgagtcccag tgctgcagac atgaggcctg aacctcctaa
                                                                     1560
ttctctggat cttaatgaca ctcatcctcg gagaatcaag ctcacagccc caaatatcaa
                                                                     1620
tctttctctg gaccaaagtg aaggatctat tctctctgat gataacttgg acagtccaga
                                                                     1680
tgaaattgac atcaatgtgg atgaacttga tacccccgat gaagcagatt cttttgagta
                                                                     1740
cactggccat gatcccacag ccaacaaaga ttctggccaa gagtcagagt ctattccaga
                                                                     1800
atatacggcc gaagaggaac gggaggacaa ccggctttgg aggacagtgg tcattggaga
                                                                     1860
acaagagcag cgcattgaca tgaaggtcat cgagccctac aggagagtca tttctcacgg
                                                                     1920
aggatactat ggggacggtc taaatgccat cattgtgttt gccgcctgtt ttctgccaga
                                                                     1980
cagcagtcgg gcggattacc actatgtcat ggaaaatctt ttcctatatg taataagtac
                                                                     2040
tttagagttg atggtagctg aagactatat gattgtgtac ttgaatggtg caacccccaa
                                                                     2100
gaaggaggat gccagggcta ggctggatga agaaatgcta ccagatgat
                                                                     2149
```

```
<210> 3331
<211> 2683
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2684)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(1352)
<223> similar to gi5262644 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3331 ggagaattat tgacccagag gacctaaaag ctttgctcaa agtgctgcat ctcagaggaa 60 taagagaaaa ggcattacaa aaacaaattc agaaacattt ggattatatt actcaagcct 120 gcctcaagaa taaggatgtt gctattattg aactgaatga aaatgaagaa aaccaagtaa 180 ctcgagatat tgtggagaac tggtcagtag aagaacaagc aatggaaatg gatttgagtg 240 tccttcaaca ggtagaagat ctagaaagga gagttgcatc agcaagtttg caagtgaagg 300 gttggatgtg tccagagcct gcatcagaaa gggaggactt ggtatatttt gaacataaat 360 catttactaa attgtgcaag gagcatgatg gagaatttac tggcgaagac gaaagcagtg 420 cacatgcact agaacggaag agtgacaacc ccctagatat agctgtaacc aggctggctg 480 atttggagcg gaacattgaa agaagaattg aagaggatat tgctccaggg ctcagggtat 540 ggagaagggc attatcagaa gctcgcagtg ctgcacaggt agctctgtgc attcagcaat 600 tacagaaatc aatagcatgg gaaaaatcaa ttatgaaagt ttactgccaa atctgtcgaa 660 agggagataa tgaagaactg cttcttcttt gtgatggctg tgacaaaggc tqtcatacct 720 actgccatag acccaagatt acaacaatcc cagatggaga ctggttttgt ccagcttgca 780 ttgctaaggc aagtggtcaa actctaaaaa tcaaaaaact tcatgtcaaa ggaaaaaaga 840 ctaatgagtc aaagaaaggc aagaaggtaa ctttaacagg agatactgaa gatgaagact 900 ctgcatctac aagtagttca ctaaaaagag gaaacaaaga cctcaagaaa agaaaaatgg 960 aggaaaacac ttctattaac ttgtcaaaac aagaaagttt tacttcagtt aagaaaccta 1020 aaagagatga ctccaaggac ctagctcttt gcagtatgat tctgactgaa atggaaactc 1080 atgaggatgc atggcctttt ctacttcctg taaacttgaa acttgttcct ggttataaga 1140

```
aagttattaa gaagcctatg gatttttcca caattagaga gaaactaagt agtggacagt
                                                                  1200
atccaaacct tggaaacctt tgctctagat gtcaggcttg tttttgacaa ctgtgaaaca
                                                                  1260
tttaatgaag atgattctga tataggcaga gctggccaca atatgaggaa gtattttgaa
                                                                  1320
aaaaagtgga cagatacttt caaagtgagc tgaagttata ataatctctt tattttttc
                                                                  1380
cttctaaaca aggacaaatg agaccagcaa tgtgaactgt atttacataa acgtgcaagg
                                                                  1440
cacatacata atgactttct ttttccttaa gtataaaaaa aaagtatcag aagaatgata
                                                                  1500
ccatttttaa aggcttcatt cctacaacaa ccaaggccct cggttattgg tttgtgtgat
                                                                  1560
ttatcagcta atttaggtag aacagggaag cacacccaaa gaattttcaa aggaaagggt
                                                                  1620
gttatagtgc aatagcaatt aaaatatatc aaatcgcact gaatactcaa caccagagct
                                                                  1680
ctaatgtggg aaatggttct cctttccctc tcaataaata tctatttttc attttttac
                                                                  1740
1800
atccagaatc ttcgttttct gtgaaaagga agaactagaa aattgcttta aatcttggaa
                                                                  1860
aatacaaggg aatgttttaa aatataaaac aaagccaagt taaactgttt acactggatg
                                                                  1920
tgcctattaa aagcacccaa anaggaaaac ttttactgta ggagttacaa gtacatttat
                                                                  1980
atatatatgt tgctgcatca cttgtgtagt taaattgtat ttcaaaacag tgaaaaaatt
                                                                  2040
gacatgtata tactgttcat tcttgtttat attaagtctt gttttaaata tgtattatgt
                                                                  2100
gtatatattg tttgcagaca ttattgttca tgccttagag gattgtagca ttttattttc
                                                                  2160
gtctgaaggt aatgatagct atacagtctg tacagtaatt atcctctacc aacactgtgg
                                                                  2220
cgtctcctta atcttggtag tgcctgcctt tgaaacaqqq tqtaqqqqat attaqttttc
                                                                  2280
catttttcta ttttgttata taattttaag ccaccagggc ctaaattaaa gtataatcat
                                                                  2340
ttqtatccat gtggaataaa attgtgacaa tttcctacgc acacagtatt ttttcataga
                                                                  2400
aacatttccc tcccatttgc cttgcctcag aaataaattt aaaagacgtt tgtaaccact
                                                                  2460
gtgttttatc tactgtgtgt tgtggtggcc tgttggaggc aaatagatca gattttttt
                                                                  2520
gtacctacgt aagagtactt gaagttttat ttaaaataaa atgttgtgga aaaggtagca
                                                                  2580
ttcttttttt aggagtgtta tttttcacta tgtgtggcac ggatacaata aaagactttt
                                                                  2640
acaaactaaa aaaaaaaaa aggggggggc cgtttttat ata
                                                                  2683
```

```
<210> 3332
<211> 2865
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2416)
<223> similar to gi5596370 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3332
atggagcggc tttggggtct attccagaga gcgcaacaac tgtccccaag atcctctcag
                                                                       60
acceptctacc agceptgtgga aggcccccgg aaagggcacc tggaggagga agaggaagac
                                                                      120
ggggaggagg gggcggagac attggcccac ttctgcccca tggagctgag gggccctgag
                                                                      180
eccetggget ctagacceag geagecaaac eteatteeet gggeggeage aggacggagg
                                                                      240
gctgccccct acctggtcct gacggccctg ctgatcttca ctggggcctt cctactgggc
                                                                      300
tacgtcgcct tccgagggtc ctgccaggcg tgcggagact ctgtgttggt ggtcagtgag
                                                                      360
gatgtcaact atgagcctga cctggatttc caccagggca gactctactg gagcgacctc
                                                                      420
caggccatgt tcctgcagtt cctgggggag gggcgcctgg aggacaccat caggcaaacc
                                                                      480
ageetteggg aaegggtgge aggeteggee gggatggeeg etetgaetea ggaeattege
                                                                      540
gcggcgctct cccgccagaa gctggaccac gtgtggaccg acacgcacta cgtggggctg
                                                                      600
caattcccgg atccggctca ccccaacacc ctgcactggg tcgatgaggc cgggaaggtc
                                                                      660
```

```
ggagagcage tgeegetgga ggaceetgae gtetaetgee eetaeagege categgeaae
                                                                      720
gtcacgggag agctggtgta cgcccactac gggcggcccg aagacctgca ggacctgcgg
                                                                      780
gccaggggcg tggatccagt gggccgcctg ctgctggtgc gcgtgggggt gatcagcttc
                                                                      840
gcccagaagg tgaccaatgc tcaggacttc ggggctcaag gagtgctcat atacccagag
                                                                      900
ccagcggact tctcccagga cccacccaag ccaagcctgt ccagccagca ggcagtgtat
                                                                      960
ggacatgtgc acctgggaac tggagacccc tacacacctg gcttcccttc cttcaatcaa
                                                                     1020
acccagttcc ctccagttgc atcatcaggc cttcccagca tcccagccca gcccatcagt
                                                                     1080
gcagacattg cctcccgcct gctgaggaag ctcaaaggcc ctgtggcccc ccaagaatgg
                                                                     1140
caggggagcc tectaggete ecettateae etgggeeeeg ggeeaegaet geggetagtg
                                                                     1200
qtcaacaatc acaggacctc cacccccatc aacaacatct tcggctgcat cgaaggccgc
                                                                     1260
tcagagccag atcactacgt tgtcatcggg gcccagaggg atgcatgggg cccaggagca
                                                                     1320
gctaaatccg ctgtggggac ggctatactc ctggagctgg tgcggacctt ttcctccatg
                                                                     1380
gtgagcaacg gcttccggcc ccgcagaagt ctcctcttca tcagctggga cggtggtgac
                                                                     1440
tttggaageg tgggeteeac ggagtggeta gaaggetace teagegtget geaceteaaa
                                                                     1500
gccgtagtgt acgtgagcct ggacaacgca gtgctggggg atgacaagtt tcatgccaag
                                                                     1560
accagecece ttetgacaag teteattgag agtgteetga ageaggtgga tteteceaae
                                                                     1620
cacagtgggc agacteteta tgaacaggtg gtgttcacca atteccaget gggattgetg
                                                                     1680
aggtgatccg gcccctaccc atgggacagc agtgcctatt tccttcacgg cctttgtggg
                                                                     1740
agtccctgcc gtcgagttct cctttatgga gggacgacca gggcttaccc attcctgcac
                                                                     1800
acaaaggagg acacttatga gaacctgcat aaggtgctgc aaggccgcct gcccgccgtg
                                                                     1860
gcccaggccg tggcccagct cgcagggcag ctcctcatcc ggctcagcca cgatcqcctq
                                                                     1920
ctgcccctcg acttcggccg ctacggggac gtcgtcctca ggcacatcgg gaacctcaac
                                                                     1980
gagttetetg gggaceteaa ggeeegeggg etgaceetge aqtqqqtqta eteqqeqeqq
                                                                     2040
ggggactaca tccgggcggc ggaaaagctg cggcaggaga tctacagctc ggaggagaga
                                                                     2100
gacgagcgac tgacacgcat gtacaacgtg cgcataatgc gggtggagtt ctacttcctt
                                                                     2160
teccagtacg tgtegecage egacteeeeg tteegecaca tetteatggg cegtggagae
                                                                     2220
cacacgctgg gcgccctgct ggaccacctg cggctgctgc gctccaacag ctccgggacc
                                                                     2280
cccggggcca cctcctccac tggcttccag ggagagccgt ttccggcgtc agctaggccc
                                                                     2340
tgcttcacct gggacgcttg caagggggca gccaatgcgc ttagcgggga tgtctggaac
                                                                     2400
attgataaca acttctgagg ccctggggat cctcacatcc ccgtccccca gtcaagagct
                                                                     2460
cctctgctcc tcgcttgaat gattcagggt cagggaggtg gctcaaagtc cacctctcat
                                                                     2520
tgctgatcaa tttctcatta cccctacaca tctctccacg gagcccagac cccagcacag
                                                                     2580
atatccacac accccagccc tgcagtgtag ctgaccctaa tgtgacggtc atactgtcgg
                                                                     2640
ttaatcagag agtagcatcc cttcaatcac agccccttcc cctttctggg gtcctccata
                                                                     2700
cctagagacc actctgggag gtttgctagg ccctgggacc tggccagctc tgttagtggg
                                                                     2760
agagatcgct ggcaccatag ccttcatggc caacaggtgg tatgtggtga aaggggcgtg
                                                                     2820
gagtttcaat atcaataaac ccacctgata tcaataaaaa aaaaa
                                                                     2865
```

```
<210> 3333
<211> 1716
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(1478)
<223> similar to gil334149 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3333

```
ggcaaggcga ggcgaaagct gcacagggcc ctacgcggcc gcctcagcat gtcgqacttc
                                                                       60
gacgagttcg agcggcagct caacgagaat aaacaagagc gggacaagga gaaccggcat
                                                                      120
cggaagcgca gccacagccg ctctcggagc cgggaccgca aacgccggag ccggagccgc
                                                                      180
gaccggcgca accgggacca gcggagcgcc tcccgggaca ggcqacqacq caqcaaacct
                                                                      240
ttgaccagag gcgctaaaga ggagcacggt ggactgattc gttccccccg ccacgagaag
                                                                      300
aagaagaagg toogtaaata otgggaogtg coaccoccag gotttgagca catcaccoca
                                                                      360
atgcagtaca aggccatgca agctgcgggt cagattccag ccactgctct tctccccacc
                                                                      420
atgacccctg acggtctggc tgtgacccca acgccggtgc ccgtggtcgg gagccagatg
                                                                      480
accagacaag cccggcgcct ctacgtgggc aacatcccct ttggcatcac tgaggaggcc
                                                                      540
atgatggatt tetteaaege eeagatgege etggggggge tgaeeceagge eeetggeaae
                                                                      600
ccagtgttgg ctgtgcagat taaccaggac aagaattttg cctttttgga gttccgctca
                                                                      660
gtggacgaga ctacccaggc tatggccttt gatggcatca tcttccaggg ccagtcacta
                                                                      720
aagatccgca ggcctcacga ctaccagccg cttcctggca tgtcagagaa cccctccgtc
                                                                      780
tatgtgcctg gggttgtgtc cactgtggtc cccgactctg cccacaagct gttcatcqqq
                                                                      840
ggcttaccca actacctgaa cgatgaccag gtcaaagagc tgctgacatc ctttgggccc
                                                                      900
ctcaaggcct tcaacctggt caaggacagt gccacggggc tctccaaggg ctacqccctt
                                                                      960
ctgtgagtac gtggacatca cgtcacggat caggccattg cggggctgaa cggcatgcag
                                                                     1020
ctgggggata agaagctgct ggtccagagg gcgagtgtgg gagccaagaa tgcccacgct
                                                                     1080
ggtgagcccc ccgagcacca tcaatcagac gcctgtgacc ctgcaagtgc cgggcttgat
                                                                     1140
gageteceag gtgeagatgg geggeeacee gaetgaggte etgtgeetea tgaacatggt
                                                                     1200
gctgcctgag gagctgctgg acgacgagga gtatgaggag atcgtggagg atgtgcggga
                                                                     1260
cgagtgcagc aagtacgggc ttgtcaagtc catcgagatc ccccggcctg tggacggcgt
                                                                     1320
cgaggtgccc ggctgcggaa agatctttgt ggagttcacc tctgtgttttg actgccagaa
                                                                     1380
agccatgcag ggcctgacgg gccgcaagtt cgccaacaga gtggttgtca caaaatactg
                                                                     1440
tgaccccgac tcttatcacc gccgggactt ctggtagagg cggctggggg agggtggggg
                                                                     1500
cagggctggc tgggggcttc tccccactcc cgccccccc cttatccccc tctgaagacg
                                                                     1560
atgggcagag gagtgacagc cgcagacaca cgacagccgg cagcaactgg aatggcagca
                                                                     1620
attaagggtg gggagcgggg gttggggggt tggggggtta gggcagggag gggactgggg
                                                                     1680
aagtgcgcac acagccccac acagacaaca cgcacg
                                                                     1716
     <210> 3334
```

```
<210> 3334

<211> 1032

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1035)...(242)

<223> similar to gi950115 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3334
cttttccaca aagggattaa attggggaac ccccgggttt tccccaccc ccggttttaa
                                                                      60
aaaccgggcc caggaattta attttggggc cccataaaaa aaattttacc ttgccaaccc
                                                                     120
ccgggggaaa aaattggatc ctttaaaagg gcccccctt ttttttttt ttgctattaa
                                                                     180
tcctgccaca atattttaa ttacgtacaa agatctgaca tgtcacccag ggacccattt
                                                                     240
cacccactgc tctgtttggc cgccagtctt ttgtctctct cttcagcaat ggtgaggcgg
                                                                     300
ataccettte eteggggaag agaaateeat ggtttgttge eettgeeaat aacaaaaatg
                                                                     360
ttggaaagtc gagtggcaaa gctgttgcca ttggcatctt tcacgtgaac cacgtcaaaa
                                                                     420
gatccagggt gcctctctct gttggtgatc acaccaattc ttcctaggtt agcacctcca
                                                                     480
```

```
gtcaccatac acaggttacc agtgtcgaac ttgatgaaat cagtaatctt gccagtctcc
                                                                      540
aaatcaatct gaatggtatc attcaccttg atgaggggat cggggtagcg gatggtgcgg
                                                                      600
qcatcatgag tcaccagatg agggattcct tttgtgccca caaagatctt tctcactttg
                                                                      660
cacaacttgt acttggcctc ctcaggtgta atacgatgta cagcaaagcg acccttggtg
                                                                      720
tcatagatca gacggaaatt ctctcccgtc ttgtcaatgc tgatgacatc catgaatcca
                                                                      780
gcagggtagg ttatatcagt tcggaccttg ccatcgattt taatgaaccg ctgcatgcaa
                                                                      840
atcttcttta cttcatctgc tagtcagggc atacttaagt ctgttcctca ggaaaaatga
                                                                      900
tgaaggggag acactctctc aacttgtggg gaccggtgga tggacgagga gcaaacacac
                                                                      960
cggtcaattt atccagcatc caatgctttg gagctgccac ccgcttcaga tgcttcttgg
                                                                     1020
gaccacgage ca
                                                                     1032
```

```
<210> 3335
     <211> 361
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(362)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (361)...(196)
     <223> similar to gi1841302 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3335
ctcacgcaan gcatggnntt aacgtcccta aaancccgcc ggacttttct gtaagaaagt
                                                                       60
gtggcanagc accaacccca taaangtgac acatgtacaa ngaagggcaa gganttctct
                                                                      120
gtacgcccag ggaaagcggc gttatgacag gaagcagagt ggctctttgt gtgccctggc
                                                                      180
ttgtgttctg aagatacagc tgataggtta gttgggtcca gattatagag gactgagtat
                                                                      240
tcagcaatgg tgggtgaatt atttaagtct ttggtgttca tctatttaca ggaatgtttt
                                                                      300
cgatttaaag gattaagtct tagcacatta gaaaggaaat aaaaatgaag attgtactat
                                                                      360
                                                                      361
```

```
<210> 3336
<211> 3818
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3819)...(65)
<223> similar to gi3168604 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3336 tttttttcgc tatctaagga cataacttta ttggaaacaa agagtggggt gcagaagatg 60 gctaggagtc aggctctgag ggaggtggtg gcttctcatc atcaggggga caatcgatga 120 agtcggccag catggcagct gtgtcatcct gctccttttc ctggagagct tcggcctctg 180 tctctgtctc catctcttct tctgcaggtg tctctggtgg gggctgcacc ttgtcactcc 240 catcctcagt ctcctctcc aacagggttg ggggagcaga gggctcttct tcaacaagct 300 cctggggagg gggccctgcc gcagggcttt ccccttccct ctccacctct ccctgggagg 360 ggagcgcttc aggggccagg gtgggagctg tgtcagcccc acgctcctcc tccgtccctg 420 gctcctccac ttccaaaagc agcccgggtt cgggttcggg ttctggctgc acctttgggg 480 gagactcagg gggaggcaga gctggaggca gggttgaggg tggaggtgca ccttcttcta 540 cctccctcc tgctgtgcca aactccaggt cttccacctc ttccagttct tcttcctcct 600 ceteatecte etettettet tetteeteta acteacette ttetteetea aattetteet 660 caaactette tteeteetet tetteetett caaaatatte etetteatee tetteetett 720 cctcaaagtc ttcctcctct tcctcttcct caaagtcttc ctcctcttcc tcttctt 780 840 taactgtcaa atcctcttcc agggctgggg gtcctccccc accaggagtc ccttcaggga 900 ccaactgggg tggagggagc gtcacaggac caggaacagg cggcggcgga ggtgggggtg 960 gcgggagagg ccctggggct gcaggaagtt cttcaggctc ctccttcgct ggcacaggag 1020 gggaggctgt tggtggccca gtgggggcta tagggggtgg tgtggcacct gagggtggtg 1080 ggggtggcag ggggggaagc ccctcgggca cgatcaccac gctgtcatca gagtcacttt 1140 ccaaggagat ctccacatca gatgcctcct ccttgtcata gtggacaaag gctggtctgg 1200 gcactctccc cccaaaagtt tcatctgggg gtatagtagg tgggggggtc ccactagggg 1260 caaggatggg gtcctcattt gagcctgccc ggtggttctc agggccagga agaagccggg 1320 gaggacagac actaggcctg gacagaaggc ctaggaggtt ggctgtggtg gaggtccagg 1380 gctccgaggg cacagggcct gctgagggca tggggcctgc tgaagggcat ggggcctgct 1440 gagggcatgg agcccactga gggcatgggg cccggaggat ggaacggtgg ggccctgaag 1500 ggcgatgggg cctcaggagg gggactggag caggtgtggg gcaggtgggg cccatgggct 1560 gcaggggagg aacccggggg tgggtcagag cagcacaggt caccagtgct tctgagcaag 1620 aaagaggaga cctcaaggct atcttctcgc tggccgaggg agaaggcttg cagggcacag 1680 gcaagaggag gtgggcagcg aggagatggg gccagcagca gcgccagcag caggcagtag 1740 agttcacggc ggcagcggga gctcgtgtac ggggagctgc ctaggacctc accctgctgt 1800 acacccatga ccaggggag gaccaggtca tgcagtctcc tgtgagtctc ctccttgatg 1860 agaggcccac acatgaggat ggtccggctg aggcctctga gtgcagccgc acacacgtcg 1920 ctgttggcat tgctatcccc tttccggtgg cttggcgggg ccatagcttc ccccacatcc 1980 agetttaget tettggggge getaggette ceagtetgea aacteceate agggeteece 2040 cgcgggctac gcagcttaag ggcatcagct ggcggggaga tgtcgctgag caggtgggtg 2100 agcagggeet etecagagge tectecetga ageatteceg eegaggeeee acaaacetge 2160 acccacaget ctaatatege atacacettg gteegaaceg tgetgtaagg ceteteetgg 2220 cctggagaga gggaatctct accgatgctc caggaattga ggacctgggg aagcaggcgg 2280 ccgatcagga tcccaaagcg caagagccgg cttccacacg cgaggatgag tgcagacagc 2340 aggtccaagg ccttcaaggt ggatagaggg cagcagcagc agccgcaggg accatctcca 2400 tgcaagctct ggagaaaaa ggggcagaga taaagagtgg aggaagaaag tgagagccag 2460 agagagacag aaacagggaa tgaccattta catatgtaca cataggtaag aaacccaacc 2520 cctgatctca tctctcccaa caaaatcaaa cccctatcct ctaaaataga ccctggatgg 2580 aaggtaagaa ggatggctgg gcctctcagc aatgactcag ctgagtcccc aaattcaccc 2640 tcccccaagg aagcatttgc tacactctga cactgtgctc ctgtgtcacg acacatagga 2700 agtgatgtta tttggacaaa agtagaagct ctctgggacg gactccagga tgacactgtt 2760 tggggagact caggtcccca gtactttcct ggttgcctgg tatcctgagc aagggctctg 2820 aagagatgac aaatcccact tacaatattc ttgctactga cgctgagggt ccggcagatg 2880 aaatccagga tttcctgcac agggacggac acgggagctc caaactcaga gctgagcatg 2940 agccctaggc agcgggccag tcccgaaaac ctctgccgaa gctggagaag gacatgggca 3000 tcaccatctt ctgaggacag cagcatctcc accccagggc cttcattctg cacaggagca 3060 gtctctgctc cctcgtacag ggcccccagc agggtgtgca gtgaggccag cagactgtgt 3120

```
ageteetget eccagetete ggtgtgette aggeettggg aaaageeage eectaaagag
                                                                     3180
ggcagccggg aataacactc acaggccaac tgttggagct gagggctcaa ggcatccacc
                                                                     3240
ctagacagaa aaaatgaggc cagcttgcct ttgagagaac cacaagcccg agggaaatag
                                                                     3300
gtcatacaag ccttcattcc ttccaatgct gactgctcac actctggcct gaggcccagc
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agggaggtga gaaggccagg gaggtggttc atggagatgt cccggaacag tgcaggcagc
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tgggctgcat atcggaggag gtccctcagg acagccacgg ccagctccat tgtggcaggc
                                                                     3480
gggtcctggg tctgtaacac ctgctgaatg ctccgaagcc aagacacaca gtgctgctgg
                                                                     3540
aatagctctg tggggctctc ccctaccagc agggacagca gacacaggcc ctcaaaccga
                                                                     3600
gttttgatgg aactgagacg tgcattactg agactcacca atgccccaag agctgaaagg
                                                                     3660
ttctgggccc cgcccaccga cccatgcagc cgcaataggc acatgagccc gggcaaatgt
                                                                     3720
ggggccgagc ggtttggggg atgcaccgga gcaacggcag accccgttcg aggttgcagc
                                                                     3780
aaaccagaaa cactctccag cagcagcagg cggagccg
                                                                     3818
```

```
<210> 3337
<211> 1501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1503)
<223> similar to gi5257114 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3337 atgageeeeg ggetgetget geteggeage geegteetge tegeettegg eetetgetge 60 accttcgtgc accgcgctcg cagccgctac gagcacatcc ccgggccgcc gcggcccagt 120 ttccttctag gacacctccc ctgcttttgg aaaaaggatg aggttggtgg ccgtgtgctc 180 caagatgtgt ttttggattg ggctaagaag tatggacctg ttgtgcgggt caacgtcttc 240 cacaaaacct cagtcatcgt cacgagtcct gagtcggtta agaagttcct gatgtcaacc 300 aagtacaaca aggactccaa gatgtaccgt gcgctccaga ctgtgtttgg tgagagactc 360 ttcggccaag gcttggtgtc cgaatgcaac tatgagcgct ggcacaagca gcggagagtc 420 atagacctgg ccttcagccg gagctccttg gttagcttaa tggaaacatt caacgagaag 480 gctgagcagc tggtggagat tctagaagcc aaggcagatg ggcagacccc agtgtccatg 540 caggacatgc tgacctacac cgccatggac atcctggcca aggcagcttt tgggatggag 600 accagtatgc tgctgggtgc ccagaagcct ctgtcccagg cagtgaaact tatgttggag 660 ggaatcactg cgtcccgcaa cactctggca aagttcctgc cagggaagag gaagcagctc 720 cgggaggtcc gggagagcat tcgcttcctg cgccaggtgg gcagggactg ggtccagcgc 780 cgccgggaag ccctgaagag gggcgaggag gttcctgccg acatcctcac acaqattctq 840 aaagctgaag agggagccca ggacgacgag ggtctgctgg acaacttcgt caccttcttc 900 attgctggtc acgagacctc tgccaaccac ttggcgttca cagtgatgga gctgtctcgc 960 cagccagaga tcgtggcaag gctgcaggcc gaggtggatg aggtcattgg ttctaagagg 1020 tacctggatt tcgaggacct ggggagactg cagtacctgt cccaggtcct caaagagtcg 1080 ctgaggctgt acccaccagc atggggcacc tttcgcctgc tggaagagga gaccttgatt 1140 gatggggtca gagtccccgg caacaccccg ctcttgttca gcacctatgt catggggcgg 1200 atggacacat actttgagga cccgctgact ttcaaccccg atcgcttcgg ccctggagca 1260 cccaagccac ggttcaccta cttccccttc tccctggggc caccgctcct gcatcgggca 1320 gcagtttgct cagatggagg tgaaggtggt catggcaaag ctgctgcaga ggctggagtt 1380 ccggctggtg cccgggcagc gcttcgggct gcaggagcag gccacactca agccactgga 1440 ecceptacta tacaccetae agecceageag etageageee geacceceae cacceceeta 1500

2160

С

```
<210> 3338
<211> 6298
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(6298)
<223> similar to gi2564316 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 3338 ggtgaaggac ctgggcagcc tcaatgggac gtttgtgaat gacatgcgca tcccggacca 60 gaagtacgtc acgctgaagc tcaacgatgt catccgcttt ggctacgatt ccaacatgta 120 tgtgctggag cgtgtgcagc accgagtccc ggaggaggca ctcaagcatg aaaagtacac 180 cagccagctg caggtgagcg tgaagggttt ggcgcccaag aggagcgagg cactgccgga 240 aacacaccc atactgcgag gcctcgaacc ccaggccgga gaagggggac cggagaccag 300 gaacagaggc agcctcttac cgcacacccc tgtatgggca gccctcctgg tggggtgagg 360 acgatggtag cacgctgcct gacgcccagc gccagggaga gccctaccca gagcgcccca 420 agggacccgt gcagcaggac ggggagctcc acggcttccg cgcccctgct gagcctcagg 480 gctgctcgtt ccggcgggag cccagctact tcgagatccc cacgaaggag accccgcagc 540 cgtcgcagcc ccccgaggtg ccggcacacg agatgcccac gaaggatgca gaggcaggtg 600 ggggcggagc ggcccctgtg gtgcagagcc acgcctcctt caccatcgag tttgatgact 660 gcagccctgg caagatgaag atcaaggacc atatcaccaa gttttccctg cgccagcggc 720 ggcccccggg caaggaggcc acacctggcg agatggtgtc ggctgagacc aaggtggccg 780 actggctggt gcagaatgac ccgagcctgc tgcaccgggt tggccctggg gatgaccgcc 840 acagcaccaa gagcgacctg cctgtccaca cccgcaccct gaagggccac aagcacgagg 900 acggcacgca gagtgactca gaggaccccc tggccaaggc ggcctcggcc gctggggtgc 960 ccttggaggc cagcggggg caggtgcggc tgcagaggca gatcaagcgg gacccccagg 1020 agctactaca taaccagcag gcctttgtca tcgagttctt cgacgaggac acgccccgaa 1080 agaagcgctc ccagtccttc acgcacagcc cgtccgggga ccccaaggcc gacaagcgcc 1140 gtggcccaac gccggccgat agggaccgcc ccagtgtccc agccccagtc caggcagggg 1200 geegeagete ggggeeaeag agggeegget egeteaageg ggagaagaea gaggaaegge 1260 tgggcagccc ctcgcccgcc tcccgaaccc ctgcccgccc cttcggaagc gtggggcgcc 1320 gctcccgcct ggcccaggac ttcatggccc agtgtctgcg ggagagctcc ccggccgccc 1380 ggcccagccc cgagaaggtt cctccggtgc tgcccgctcc cctgacaccc catgggacca 1440 gccccgtggg ccccccgacc ccaccgcccg cccccacgga cccccagctg accaaggcac 1500 ggaaacagga ggaggatgac agcctcagtg acgcagggac atacaccatc gagaccgagg 1560 cgcaggacac ggaggtggag gaggctcgga agatgatcga ccaggtcttt ggggtgttgg 1620 agteceetga aeteteeagg geatettegg ceacettteg eecagteate agaggggaea 1680 gagatgagtc tgatgacggg ggcgtggccc agcggatggc gctactgcag gagtttgcct 1740 cccggccact gggtgcggcc ccccaggcgg agcaccaggg cctcccggtg ccgggctccc 1800 ctgggggtca gaagtgggtg tcccgctggg ccagcctggc tgacagctac tcagacccgg 1860 gcctcacaga ggatggcctg ggacgtagag gcggggagcc ggaggggtcc ctqcctqtqc 1920 gcatgcggcg acggctccct cagctgccca gtgagagggc tgacagccct gcgggcccag 1980 agagcagcag gaggagtggg cctgggccac cggagctgga cagtgagcag cccagccgcc 2040 tetteggeea ggaggagttg gateetgaca geeteagega tgeeagtggg teggaegggg 2100 gccgaggccc cgagccaggg gtggagccac aggacagcag acgcaggagc ccccaggagg

```
ggcccacgtg gagcaggggt cggcgctcac caagggcccc cggggagcca actcccgcct
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ctttcttcat tggggaccag aatggggacg ctgtgttatc taggaaactg cttgcggctc
                                                                    2280
2340
tctatgtcag tgccaatggg agaatggtca tccagctacg gcctggacgg tccccagaac
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ccgacggccc tgccccagcc tttctccggc aagagagctt cactaaggag ccagccagtg
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gtcccccage gcccggcaag cccccccaca tctccagcca cccgcttcta caggacctgg
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eegetaceeg ggeegeacge atggaettee acteecagga cacceacetg atettgaagg
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agacggagac ggccctggcg gccctggagg cccgactcct ctctaattct gtggatgccg
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agtgtgaggg gggcagcacc ccgaggccgc cggaggacgc cctgtctggg gactcggacg
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tggacacage cageacegte ageetgegta gtggeaagag egggeeeage eecacaacee
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cccagcctct gcgggcacag aaggagatgt cgccatcccc gccagctgca caggacccgg
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gaggcaccgc cctggtcagt gcccgtgagc agtcctcaga gaggcagcat cacccacttg
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gcccgacgga catgggccgt ggagagccgg tacggcgctc agccataagg cgtggccaca
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ccagctcaga tgtgatggcc tccaaccacg aaacccctga ggccaccggg gcaggacggc
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taggtteteg ceggaaacca geggeeecae egecateece agetgeeegg gaggageaga
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gccgtagctc agccagctcc cagaaggggc cgcaggcctt gacccgctcc aacagcctqt
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ccacccctcg ccccacacgg gcctcccggc tgaggcgggc ccggctgggg gacgcttcag
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acactgaggc tgcggatggt gagcggggt ccctgggcaa ccctgagccc gtgggccggc
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cagctgctga gcaggccaag aagctgtcac gcctggacat cctggccatg ccccggaagc
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gggccggctc cttcacaggg actagtgacc ccgaggcagc ccctgcccgc accagcttct
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ctggccgcag tgtggagttg tgctgtgcca gccgcaagcc caccatggcc gaagcacggg
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ctgtctccag gaaggctgcc aacacagcca ccaccacggg tccccgccag cccttcagca
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gggcccgctc gggcagtgcc cgatacacct ccaccactca gaccccgagg gctggcagct
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ccagccgggc tcgttcccgg gcccccggcc cccgggacac ggacgacgat gaggaggagc
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ctgaccctta tggtttcatc gtgcagacgg cagagattgc ggagattgcc aggctgagcc
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agacgctggt gaaggacgtg gccatcctag cccaggagat ccacgatgtg gctggggacg
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gtgacacact gggctcctcg gagcctgccc acagcgcctc cctcagcaac atgcccagca
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cccccgcctc gaccatctct gcccgggagg agctggtgca gcgcatcccc gaggccagcc
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tcaacttcca gaaggtgccg cccggctcgc tgaactctcg ggactttgac cagaacatga
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acgacagetg tgaggaegee etggeeaaca agacgeggee teggaacega gaggaggtga
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tettegataa eetgatgetg aaceeggtgt eecagetgte geaggeeate egtgagaaca
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cagagcacct tgccgagaag atgaagatcc tctttcagaa cacagggaga gcttgggagg
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acctggaagc caggatcaac gccgagaacg aggtgcccat cctgaagaca tctaacaagg
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aaatcagctc catcctgaag gaactgaggc gggtgcagaa acagctggaa gttatcaatg
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ccatcgtgga ccccagtggg agcctggacc tgctcacagg aaacaggagc ttggccagct
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ctgcacagcc ggggctgggg aagggccgcg tggctgccca gagcccaccc tcacccgcct
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cagccgagge cetgetgeea gecetgeece tgaggaattt cecacagegg gecagetgtg
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ggcctcccag cctcccggac cccaccttcc tccctgatgc cgagaggttc ctgatctagg
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ccccagacct ggccaggcca gcctccctgt gcgtgtgcgt ctctgccttc cgtccgccgc
                                                                    4560
acacccgcct gcctggccgc aggtggttct ccctgaagac ccccacatgt gccatatccc
                                                                    4620
tgtgggcggg tgcctcccac gcccttgccc cctcgtcagc tcccagccag caccctactc
                                                                    4680
accetgteca geoccatgge cacececace cetgeetege eccetacagg cetetgggee
                                                                    4740
cageteetgg ecaggetget gecaaggtea ageceteaag ggeattaeee egeeteetet
                                                                    4800
tcatcactgt tatttttgtc tttagcttta aaggaaagag ttgttggtgc cattgcaggt
                                                                    4860
gccccctcca ggcctgactg gctccgccag gcactaacct gccataaccc tttgtgctgg
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cctgcggcca ggcagaggaa gagaggtcga ctgtggggtc atttggtgcc aaacatggag
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gtgggcaggc tcacctgttc ctgggactgt ctgagatggc agggcacttg ccctggtggc
                                                                    5040
teccaeetga eeccaggeet tttataggea ggageeecae tgettecage etetggtgee
                                                                    5100
aacacagttg ccaaacccat tgagcttggg gctgccctgt ggaggcctcc tgggtatgga
                                                                    5160
ccaggggctt gttgagagct gagccatgca cacaggtgca gacacccccc aactcccatg
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cacacggcta gtccaggcgc ctccacgctg caccgtgagg actgcagggc atgtcccgt
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gaggggctat gggcctctgt aggtgggctt ccaaggtcct gggtgcagcc gggtgcatgg
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cagcccttct ggcgggggtg agcgcacgac caaagtcact ggaagccggg tttccggaag
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ctcgcagctt ggcctgcacc acacgccctc cccttttggc ttcacgccat caggcctcaa
                                                                    5460
gtgggcatgg gggcagggac gggcccagga actgttgttt tctcaggatt ctttcagctg
                                                                    5520
ggaacatggc aggtgagcag agcttggtgc ctctgccgtg gcccctgctg gggcagcccg
                                                                    5580
```

```
tgttgccgga gcctctaagc caaagagccc gttggccgtg gttggtgggg gtggacgtgg
                                                                    5640
gggtgtccca cctggaccag actggcgtgg gtgagctcca caccctgcct ggcaatggta
                                                                    5700
tgagagtcgg acctggacag ggccagctgc tgggggagcg gcactgggga ctggaggctg
                                                                    5760
gaagcgggtg gtgtgtgtcc cctgtttact tttagctgag ctqqgqttqq qtqtacqqqt
                                                                    5820
tetgtteete tgageeetge ggeeeacetg atgtttaegt gtgtgtga ggggggggg
                                                                    5880
gggtggcagg tgtcccccc tggtccccgc cccaagagcc tgctgtctgt atggaggagg
                                                                    5940
tgctagcccg gtccaccggg ctgctgccca cccctgcatg ccccagttgc ccaccccgcc
                                                                    6000
tgcccctgga catgaagtgg tcacgcttca tccacggctc cttcccaccc ctcggcagtg
                                                                    6060
gctgtgcaat gttttaagtt cacaagttcc tgctcctccc cacactgagc tcctttgttc
                                                                    6120
ctcccctcc agcctttgcc tgggaactgg tccttgtttg ccgggcttct cggagggttc
                                                                    6180
actgtacatt cgttctcagg tggtcttgtg gctgtctttc ggaaaatggt tattttatat
                                                                    6240
gatttgtcat ggaatttgtt ctaataaatc attcttctat cacatggcaa aaaaaaa
                                                                    6298
```

```
<210> 3339
     <211> 4348
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(3019)
     <223> similar to gi3882181 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3339
gttacattta tgacatcctg ggtggaattc ttaagaaata ttggactaaa atacatactt
                                                                       60
tctcagcagc agttgttaca gtttgctaag gaaatcagtg tgagggctaa tacagaaaac
                                                                      120
tggtccaaag aaacattgca aaatacagtt gatatccttc tgcatcatat attccaagaa
                                                                      180
cgaatggatt tgttatctgg aaattttctg aaagaactat ctttaatacc attcttatgt
                                                                      240
cctgagcggg cccccgcgga attcattaga tttcatcctc aatatcaaga ggtaaatgga
                                                                      300
acacttecte ttataaagtt caatggagca caggtaaate caaaatteaa qeaatqtqat
                                                                      360
gtactccagc tgttatggac atcctgccct attcttccag agaaagctac acccttaagc
                                                                      420
attaaagaac aagaaggtag tgaccttggt ccacaagaac agcttgaaca agttttaaat
                                                                      480
atgcttaatg ttaacctggg tcctcctctt tgataaggta atcaataact gcagaaacat
                                                                      540
atgcaacata acgacgttgg atgaagaaat ggtaaaaact agaqcaaaag tcttaaggag
                                                                      600
catatatgaa ttcctcagtg cagaaaaaag ggaatttcgt tttcagttgc gaggggttgc
                                                                      660
ttttgtgatg gtagaagatg gttggaaact tctgaagcct gaggaggtag tcataaacct
                                                                      720
agaatatgaa tetgatttta aacettattt gtacaageta eetttagaae ttggcacatt
                                                                      780
tcaccagttg ttcaaacact taggtactga agatattatt tcaactaagc aatatgttga
                                                                      840
agtgttgagc cgcatattta aaaattctga gggcaaacaa ttagatccta atgaaatgcg
                                                                      900
tacagttaag agagtagttt ctggtctgtt caggagtcta cagaatgatt cagtcaaggt
                                                                      960
gaggagtgat ctcgagaatg tacgagacct tgcgctttac ctcccaagcc aggatggtag
                                                                     1020
attggtaaag tcaagcatct tagtgtttga cgatgcgcca cattataaaa gtagaatcca
                                                                     1080
ggggaatatt ggtgtgcaaa tgttagttga tctcagccag tgctacttag ggaaagacca
                                                                     1140
tggatttcac actaagttga taatgctctt tcctcaaaaa cttagacctc gattattgag
                                                                     1200
cagtatactt gaagaacaat tagatgaaga gactcccaaa gtttgtcagt ttggagcgtt
                                                                     1260
gtgttctctt caaggaagat tgcagttact cttgtcttct gaacagttca ttacaggact
                                                                     1320
gattagaatt atgaagcatg aaaatgataa tgcttttctg gccaatgaag aaaaagccat
                                                                     1380
aagactttgc aaagccctaa gagaaggatt gaaagtatcc tgctttgaaa agcttcaaac
                                                                     1440
aacattaaga gttaaaggtt ttaatcctat tccccacagc agaagtgaaa cttttgcttt
                                                                     1500
```

```
tttgaagcga tttggtaatg cagtcatctt gctctacatt caacattcag acagtaaaga
                                                                     1560
cattaatttc ctgttagcac tggcaatgac tcttaaatca gcaactgaca atttgatttc
                                                                     1620
tgacacttca tatttaattg ctatgctagg atgcaatgat atttacagga ttggtgagaa
                                                                     1680
acttgacagt ttaggagtga aatatgactc ttcggagcca tcaaaactgg aacttccaat
                                                                     1740
gcctggcaca ccaattcctg ctgaaattca ttacactctg cttatggacc caatgaatgt
                                                                     1800
tttttacccg ggagaatatg ttgggtacct tgttgatgct gaaggtggtg atatctatgg
                                                                     1860
atcataccag ccaacataca catatgcaat tattgtacaa gaagttgaaa gagaagatgc
                                                                     1920
tgacaattct agttttctag gaaagatata tcagatagat attggttata gtgaatataa
                                                                     1980
aatagttagc tctcttgatc tgtataagtt ttcaagacct gaggaaagct ctcaaagcag
                                                                     2040
ggacagtgct ccttctacac caaccagccc cactgagttc ctcacccctg gcctgagaag
                                                                     2100
cattcctcct cttttctctg gtagagagag ccacaagact tcttccaaac atcagtcccc
                                                                     2160
caaaaaagctt aaggttaatt ctttaccaga aatcttaaaa gaagtgacat ctgtqqtqga
                                                                     2220
gcaagcatgg aagcttccag aatcggaacg aaaaaagatt attaggcggt tgtatttgaa
                                                                     2280
atggcatcct gacaaaaatc cagagaacca tgacattgcc aatgaagttt ttaaacattt
                                                                     2340
gcagaatgaa atcaacagat taaaaaaaca ggcttttcta gatcaaaatg cagacagggc
                                                                     2400
ctccagacga acattttcaa cctcagcatc ccgatttcag tcagacaaat actcatttca
                                                                     2460
gtagatteta taetteatgg aateaagaag caacgageea taaatetgaa agacageaae
                                                                     2520
agaacaaaga aaaatgcccc ccttcagccg gacagactta ctctcaaagg ttctttgttc
                                                                     2580
ctcccacttt caagtcggtt ggcaatccag tggaagcacg cagatggcta agacaagcca
                                                                     2640
gagcaaactt ctcagctgcc aggaatgacc ttcataaaaa tgccaatgag tgggtgtgct
                                                                     2700
ttaaatgtta cctttctacc aagttagctt tgattqcaqc tqactatqct qtqaqqqqaa
                                                                     2760
agtetgataa agatgtaaaa eeaaetgeae ttgeteagaa aatagaggaa tatagteage
                                                                     2820
aacttgaagg actgacaaat gatgttcaca cattggaagc ttatggtgta gacagtttaa
                                                                     2880
aaacaagata ccctgatttg cttccctttc ctcagatccc aaatgacagg ttcacttctg
                                                                     2940
aggttgctat gagggtgatg gaatgtactg cctgtatcat aataaaactt gaaaatttta
                                                                     3000
tgcaacaaaa agtgtgaaga tatttaacga aaaaaaaggt agatctttga atgtggttgt
                                                                     3060
agcacgaata aattgctgta cttcattaag cttcattgcc aattagctag gaattgttaa
                                                                     3120
gcacattgca gattgttctt ggagaattct ggagttgtca tgaacatgac taccaccgga
                                                                     3180
aaaccttaac tgaatctaat agatgactat tttgaagatg gtggtgagct gcaaaatagc
                                                                     3240
tggatggatt tgaatgattg ggatgataca tcattgaact gcactttata taaccaaagc
                                                                     3300
ttagcagttt gttagataag agtctatgta tgtctctggt taggatgaag ttaattttat
                                                                     3360
gtttttaaca tggtattttt gaaggagcta atgaaacact ggacatataa ttggtttaaa
                                                                     3420
cataagggga attaagtctt tgtagtctgt catttttta agtggatcct cttggatgcg
                                                                     3480
ttattttctc atcagctggc tctgatcatg aatttgttgt aattttatgt tgtactcagt
                                                                     3540
gcatttaaga aatggtagag tattttaatc ctattacttg actaagagtg tgaaggtagt
                                                                     3600
actitttaga gtgcactgag tgcactttac atctttattt aaattttttt ttaacatctt
                                                                     3660
atgtttacag gcttcctgtt tgatgaagat agcaacggaa aactcaaaat ggtggcagtt
                                                                     3720
cttattacca gttgttagta ttgtttctgg aaactgcttg ccaagacaac atttattaac
                                                                     3780
tgttagaaca cttgctttat gtttgtgtgt acatattttc cacaaatgtt ataatttata
                                                                     3840
tagtgtggtt gaacaggatg caatcttttg ttgtctaaag gtgctgcagt taaaaaaaa
                                                                     3900
acaacctttt ctttcaatat ggcatgtagt ggagtttttt taactttaaa aacatcaaaa
                                                                     3960
attgttaaaa tcattgtgtt atctagtagt ttataattat cggcttatat ttccccatga
                                                                     4020
atgatcagaa ctgacattta attcatgttt gtctcgccat gcttctttac tttaacatat
                                                                     4080
ttcttttgca gaatgtaaaa ggtaatgata attagtttat ataagtgtac tggctgtaaa
                                                                     4140
tgatgctaaa tatactttat gcaattaagg gcttacagaa catgttgaaa ctttttttac
                                                                     4200
ttttattggg aataaggaat gtttgcacct ccacatttta ttgcttctgg atgtgaaatc
                                                                     4260
atgtaattat ttctgctgtt atataaagtg ccatactttt aataaaggaa aatgtacata
                                                                     4320
tgaaaaaaa aaaaaagggg cgcccgct
                                                                     4348
```

<210> 3340

<211> 2983

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(2984)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2314)...(1020)
<223> similar to gi35842 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3340
ttttttttt ttacacctaa atttaattta ttttattaaa ataacataat tcgagggacc
                                                                       60
atcagataac tgtattttgt caggtgcaat aaaaaacaaa attaaaaccc aaatcatcaa
                                                                      120
aaaaacctgt tttcctggct tccttggtat acacatgatg tagactagag aaacaaggct
                                                                      180
gtttgtttgt tttgtttgtt agagaaacga aaggcgtgcc ctgcggcccc gccccatag
                                                                      240
ggggcagctc cctggaaaga caaaaattca ccatgatggg aaggactggc tccctgagga
                                                                      300
ggggctgagg atgcgggaat ttgcccgagt gccttgcctg gggaaaacca tcccaatggc
                                                                      360
actgggacac cttaggaagg ctgtgaaagg gagggacgtg ttcccctaag gaaaaagttc
                                                                      420
ccatagtacc aaaggcaggg ttccttccgg gcgggccaga gttttcggca gtccttgggc
                                                                      480
tgtttgggtg cctaatgtgc caaatggtct ggacgctgca ccactcttct gaaaaaagt
                                                                      540
cccgcctgtt gacatgcatt ccttccagaa agctgatttt ccaaaattcc catggtgtct
                                                                      600
cccacaataa ggggctggga ctggcctggc ttaccttact tccctctaaa ttatcatgta
                                                                      660
gcccacaget ggggctgggc cccctgcttt tttgtactaa catcaacaat cccatttgcg
                                                                      720
catcctaaag aaaggctggg cccttgagca tgggggaatg tgggggaggg agcaggacac
                                                                      780
accagcactg caaatgggct tccttcttcc agggccccaa agggaataga aaagaaggca
                                                                      840
acaaggagtt taaggcccct gtgaancaat cctaagaagg tcccttaaca accagcttcc
                                                                      900
tctgaaaaac atgtgttctg ccctctggag aaaagggagc aagaaaagtg gtgcctgctg
                                                                      960
getteteete eteccetgge ageetgaaga eaggtgeaaa gteaactagg aagaeeagee
                                                                     1020
agcctcgggg aacttggtca gcgtgcaagc cattgatatc ctcagtgtgg gctgcccgat
                                                                     1080
gcaagggatg gctcggaagc gctccggttg atcttcggta gagagtgttg gagcagctca
                                                                     1140
atggaaggcc aggatctggg gaaaaaagag gcctctcttc ctttaacttt cttcacacag
                                                                     1200
tcagctacca gcctcttcat tgcttttggg gcagttactt atatagctta ctaagatctg
                                                                     1260
gggaggcata teetteggee caccatgaag atgatetgat eteggttqtt qatqtqaqaa
                                                                     1320
taaggaaget ecceegteat cagtteatae aataegatge cataggagta gacateegae
                                                                     1380
tggaaactga atgggttgtt atcctgcatt cggatcacct ctggggccat ccaqaggaca
                                                                     1440
gagecagtag gttgtteaae etgetgagaa eeaeteeage gtgaetttae tgttgeeaaa
                                                                     1500
ccaaaatctc caattttcac tgttaagcct tcatggagaa atatattgtt ggatttcatg
                                                                     1560
tctctatgga tgatgttctt tgcatgcaaa tagtccattc cctgagccgt ctgccgggca
                                                                     1620
atgtcaatta agctggaaca tctgaaactt ggtctcctgg acatgcaggt gtttgtagag
                                                                     1680
getgetgeee tegeaceact gggteacaat tgecaggttg teetttgtea tgtaceceat
                                                                     1740
gaaaagcaga atgttcacat gccgtgtttt gcgcagaaca gccacctcat tcctqaaqqc
                                                                     1800
ctggaattgc tctggggttg ggtcgacaac ctttaggatc tttactgcaa catctccqtq
                                                                     1860
ccatttaccc ttataaacag ttccaaaaga gcctgaccca atccgagtgg acagcatcac
                                                                     1920
ttcactggct tctatttccc aataatagct tgaatctctc tgtccacgag gcctaatttt
                                                                     1980
gtttttctcc tgggtcccag atactggtgc ccgctctctt tgtgctggca cgggggtttt
                                                                     2040
eggetgtgac cageetgttg ggeteagatt gttggggeta etggaeaggg etgaaggtga
                                                                     2100
ggctgattcg ctgtgacttc gaattgcatc cttctgcaat ccggtgcgcc gcagccgctg
                                                                     2160
ggccctggac tccaccggct cctcgtccga gctctctcca acttcgqcct ccaqctqctc
                                                                     2220
tgggcccagc tcggactggt ccgccgggcc caagggctct ggtgccttct ggaaagcgct
                                                                     2280
ggctgggact tcaccctcct ccttgaagag cagaacgtga agcttcccgc gcgccaccag
                                                                     2340
cagcccgtgg ttggcctcca gccgctgcac ctgggctgcg cggcqcaccq cqcqctcttq
                                                                     2400
ggcggcgttg gcgtgcgagc tcacgcgctc cgccttggcc agcagctqcq ccaaqqtqtt
                                                                     2460
```

```
gctggtggtg tcgtggctgc gactcagagc gcccaggccg ctctggatgc ggcgcacgga
                                                                     2520
ccctgccagg cctccctgcc ttcgagccag gcctccctgc cgctcccgca gagtctccag
                                                                     2580
catggaggcc agcttctcca gcagggtcac caccgtcacg gcgtgcacgg gaccccccgc
                                                                     2640
eggegeeteg ggeaeaggee eeggeteeaa egeaetetee etcatgatee etgaeegete
                                                                     2700
tgctccgtct gcctgcaact gctggctgca ctacggtcag gggcctcctt tccctggctc
                                                                     2760
ctccccagct ccagctgtga ctcaggcagg cggagttggc cttctggggc ggcgggaggg
                                                                     2820
cgcgagggcg tggggatgtt ggcagcgggg tctcttgaaa gcgtttcgcc ttccgctgtc
                                                                     2880
ccgcgccggg ggcctgctgg gaagcctgtt ggccccaaat cggccccctg caaaccctct
                                                                     2940
cactctgagt ttgaggtacc ctcctccgct ccaaatccct ggc
                                                                     2983
```

```
<210> 3341
     <211> 1321
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1321)
     <223> similar to gi2055392 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3341
cacacactgc accacagetc teccacetet gaggeegagg agttegtete ecqeetetee
                                                                       60
acccagaact acttccgctc cctgccccga ggcaccagca acatgaccta tgggaccttc
                                                                      120
aacttcctcg ggggccggct gatgatccct aatacaggaa tcagcctcct catccccca
                                                                      180
gatgccatac cccgagggaa gatctatgag atctacctca cgctgcacaa gccggaagac
                                                                      240
gtgaggttgc ccctagctgg ctgtcagacc ctgctgagtc ccatcgttag ctgtggaccc
                                                                      300
cctgggcgtc ctgcttaccc ggccagtcat cctggggtat qqaccactqt qqqqqaqccc
                                                                      360
agccctgaca gctgggagcc tgcgcctcaa aaagcagtcg tgcgagggca gctggggagga
                                                                      420
tgtgctgcac ctgggcgagg aggcgccctc ccacctctac tactgccagc tggaggccag
                                                                      480
tgcctgctac gtcttcaccg agcagctgag ccgctatgcc ctggtgggag aggccctcag
                                                                      540
cgtggctgcc gccaagcgcc tcaagctgct tctgtttgcg ccggtggcct gcacctccct
                                                                      600
cgagtacaac atactggtct actgcctgca tgacactcac gatgcactca acgtagtggt
                                                                      660
gcagctggag aagcagctgc agggacagct gatccaggag ccactggtac tgcacttcaa
                                                                      720
ggacagttac cacaacctgc gcctatccat ccacgatgtg cccagctccc tgtggaagag
                                                                      780
taagctcctt gtcagctacc aggagatccc cttttatcac atctggaatg gcacgcagcg
                                                                      840
gtacttgcac tgcaccttca ccctggagcg tgtcagcccc agcactagtg acctggcctg
                                                                      900
caagctgtgg gtgtggcagg tggagggcga cgggcagagc ttcagcatca acttcaacat
                                                                      960
caccaaggac acaaggtttg ctgagctgct ggctctggag agtgaagcgg gggtcccagc
                                                                     1020
cctggtgggc cccagtgcct tcaagatccc cttcctcatt cggcagaaga taatttccag
                                                                     1080
cctggaccca ccctgtaggc gqqqtgccga ctggcggact ctggcccaga aactccacct
                                                                     1140
```

1200

1260

1320 1321

ggacagecat etcagettet ttgeetecaa geecageeee acagecatga teeteaacet

gtgggaggcg cggcacttcc ccaacggcaa cctcagccag ctggctgcag cagtggctgg

gactgggcca gcaggacggt ggcttctttc acagtgttcg gaggctgagt gctgaggccg

```
<210> 3342
     <211> 777
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (46)...(338)
     <223> similar to gi1478205 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3342
gggtccgctg cagggcaggt tcagcagcaa cagcagcggc gacaccagca gggaaaagtg
                                                                       60
acagtgaaat acgatcgtaa ggagcttcgg aagcggctgg tgctggagga atggatcgtg
                                                                      120
gagcagctgg gtcagctcta cggctgcgag gaagaagaaa tgccagaggt agaaattgac
                                                                      180
attgatgatc tttttgatgc atacagtgat gaacagagag cttcaaaatt acaggaagct
                                                                      240
cttgtagact gctacaaacc aacagaggaa tttatcaaag agctgctttc tcqqataaqa
                                                                      300
qqcatgagga aactgagccc ctccgcagaa gaagagtgta tgattctgga acagggtgaa
                                                                      360
actctcccag agatgaagaa agagtcctgg gatttgtact tcatgaagac ttttgtgaaa
                                                                      420
gaataggtgt ccttatgaac aacgtttttg ttttttttt ttctttttg ggggtaaagg
                                                                      480
tgggggggtc tattagacat ttattcaaga gcgttctttt ttgggtttta aaggtttttg
                                                                      540
ttaatgtaat atttaaatac caaaaatatc ttgactttag ccacagccta cccagggttt
                                                                      600
atcaagggag ggggaccctc agggaagggc cccccaggt tgcgtttcct gcagggactc
                                                                      660
aaatgttaat teeettatga teeeggaaaa atagtttttt tacaagaagt tgggeaaaat
                                                                      720
ttttttccta aagttggaca ttggactcaa ttggcaaatt tttcaacctg gtatttt
                                                                      777
     <210> 3343
     <211> 408
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(408)
     <223> similar to gi325465 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3343
ggcttcccca agggttcaag aactccccca ccatcttcgg ggaggcattg cctcaagacc
                                                                       60
tecagaagtt tgecaccaga gacetagaet gegtgttget ecagtaegtt gatgatettt
                                                                      120
tgctgggaca ccccatggca gtcgggtgca ccaaaggaac agatgctcta ctccggcacc
                                                                      180
tggaggactg tgggtataag atgtccaaga aaaaagctta gatctgccga cagcaggtac
                                                                      240
attacttagg atttactatc cgaaagtggg agacagccta ggatcagaaa gaaacaggtc
                                                                      300
atttgaaatc tactggagcc taagaccaga aggcaggtga gagaattctt atgggctgtg
                                                                      360
gggttttgaa gactgtagat cccaaaattt gcagtataag ccaagcct
                                                                      408
```

```
<210> 3344
<211> 3932
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3933)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3934)...(282)
<223> similar to gi2245317 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3344
ttttttttt ttggggtgca ggtggcgttt attttcatgg atttatacac actggaaaag
                                                                       60
cctctgcgcc catgcccacg ccctcctccc tcccccggc gctgggtccc ctcatatgaa
                                                                      120
agggaagtaa caccgaggag cacacggaga tatagggtgt ggggctgggg gggccagcgc
                                                                      180
tggggccaaa agtctgggtc cccagcctcc cacacgcagc ccctcgggcc ccttgggtgt
                                                                      240
gtcaataaat aacccaggtc caggctggtg tgggcctcac tcctcgctgt ccagcttcag
                                                                      300
gctgatgctc cgtgctttgc cccgtgccag ggtggtgggt ggtgttcccg ggccctcacg
                                                                      360
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                                                                      540
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cagccccagc gccgcgtata cagccacatc tttgggagac ccataaccgg ccacgatgtt
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gcgagtagtc gatccgcttg gtcccccacc agcgctccag gatcttaacc acctcactgg
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aggcaccgct agtagaggtg ggtgttgagg gcaccagcat ctccagctcc tccagaaaga
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ggcccagtgg ggagccgaag aggaagaagc cagagacctt gaagtcaagg cgggcagtgc
                                                                     1980
tgctggggcc gtcaggtgcc tcggaactgg cagcgggtgg gcagaaggcc gtgcttqccc
                                                                    2040
```

```
gccggggctc ccaggaggag gtggttgcgg gggctgcctg aaggctgttc tgagagccct
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cgggctcagg actggccatg tcgctgggga tgcgctgggg aggcaaggcc gagggttctg
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ggctgccccg acceaggcct tccacaccat ctgccagggg gtcccgcact gggccaaact
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                                                                     2340
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cctggttggt gcgggcaatg acggtggcca cggcgccctg gtagcgggag gatgaggtgg
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                                                                     3660
                                                                     3720
gctgctgccc cccatcaggc aggtaatagg tctcaatttc aatggagaat ttctccacga
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gcagggcagc cttgggcagc agtgcccgga accagcctgg gatgtgggag cccacgtggt
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                                                                     3900
acaccttgtg tgtgtattgc ccgctgcccc cgggcccatc cgtgtagggc cggttggcca
ggatctccac gccgctgccc gcaccactag cc
                                                                     3932
```

```
<210> 3345
<211> 3235
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2338)
<223> similar to gi4200216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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gcctccgtag ctggccagca tcccctggac tggctgctca cagaccgggg ccccttccac 180
cgcgctcagg agtatgctga cttcatggag cggtaccgcc agggtttcac caccaggtac 240
aggatttata gggagtttgc ccgttggaag gtgaacaact tggctctgga aaggaaggac 300
```

ttattasatt	+~~~~++~~~	+-++				
aggagagaga	tyccattycc	tcttgcccca	gagtttatcc	ggaacattcg	cctccttgga	360
aggagaccca	accigcaaca	ggttacagaa	aatctgatta	aaaagtacgg	cactcatttc	420
ttactttctg	ccaccettgg	aggagaagag	tccctgacca	tttttgtgga	caagcagaaa	480
ctgggaagaa	agacagagac	aacaggaggt	gcctctataa	tcgggggcag	tgggaacagc	540
acagetgtgt	ccctggagac	cctgcaccag	ctggccgcct	cctacttcat	cgacagagag	600
agcacgctgc	gacggctgca	ccatatccag	atagccacgg	gggccatcaa	ggtcaccgag	660
accaggaccg	gtcctctggg	ctgcagcaac	tatgacaatc	tggactcagt	cagttctgtc	720
ttggtacaga	gtccagagaa	caaagtacag	ttacttggcc	ttcaggtgct	gctgcctgag	780
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aactgccctg	atgctgacat	ccaggccatg	gaggacagcc	tgctgcagat	ccaggactcc	960
tgggccactc	acaaccggca	gtttgaagag	tcagaagagt	tccaggccct	gctgaaaagg	1020
ctgcccgatg	accggttcct	gaactccaca	gctatctccc	agttctgggc	catggacacc	1080
agccttcagc	accgctacca	gcagctggga	gctggcttga	aagtgctgtt	caaaaagacc	1140
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tatgaccaat	cttcctgcca	gggccccatc	ccatqtqcct	tagacaaaga	acccacatat	1380
gcccactgtg	ctccagacaa	tagcacacgc	tataggaget	gcaacccggg	ctatatacta	1440
gcccaggggc	tataccaacc	agaggtggcc	gagtccctgg	aaaactttct	tagactagaa	1500
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gtacactcca	tcttcatcag	caatgacatg	caactaaaca	actaatttaa	cccttcctaa	1620
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gagggaggt	ttcctgactg	ggaaaggact	aacataaata	Gagataccas	gtacasasa	1860
tagactatca	ccttagaaaa	taggtggaag	actttcttta	agazatta	tatttagata	
						1920
gagatgagtg	atcoctctaa	ggatgacagc	tagatgaga	ttassasstt	tgagcccctg	1980
taactacaac	ctaccettta	gaatttgggt	cacacyaaaa	LLAACACCLL	ggcaggtctt	2040
acceptate	tassaattaa	acccagattg	ctatccggga	CLLAALTCLC	cagttggact	2100
acctatatat	acttatata	caggactctg	cactettgea	gctcattgag	ctcagggacc	2160
gggtgaacca	gettteteea	cctggcaaag	tccgacttga	ccttttctcc	tgcttgctcc	2220
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cacgcataca	cacacacaca	cacacactgg	cacagggagg	ctacaactaa	gcagcctcag	2580
atctgtaaag	ttgattggtg	ctttctaaaa	tgaatgcaat	tgaaagaaag	gagccaagga	2640
agagattaag	aaaaagaacc	agctgaacca	tgaaacaaac	aaaaatccta	aaagtgattc	2700
ttgtcattca	agaaagcaag	aggggacaac	aatgggaggg	gtcggagctc	ttcccttccc	2760
ctctgtggag	tcacttttgt	attcttttta	accagatttc	ttaaaatgtt	gttgttttgt	2820
gaatcctgac	attggttctt	acttttgtat	gctgcctcct	ctgtgccctc	ccagacgctg	2880
actgggaaac	acaagaagta	caaccaacag	gaaccagcgc	caagggcagg	cagcggcctc	2940
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ctggattgtt	cccagttccc	attgtggtcc	cttcagagct	cctttccaac	agcatctctc	3060
tgtcgaagaa	agaagctctg	tcaagttaga	gagagacaat	gtgtaggaaa	tgttcttttt	3120
taaaaaaaaa	taacaaaaac	aaaacaaaac	tatttatttt	gggattqttt	tccttqttaa	3180
tctgctccaa	ccacctgaac	atctaagtaa	acatttatct	ggtttaaaaa	aaaaa	3235
				-		

<210> 3346

<211> 847 <212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(848)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (824)...(226)
     <223> similar to gi4972706 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3346
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                                                                      120
agcgctggga cattgtcact gaggcagaca gcagccacta gtccacaatg gtttaaaaag
                                                                      180
tcagtcctgt gcccctcac tggaagcttc cattctgggc catctgcaga tattccttgt
                                                                      240
agagettete etgageeteg aagagettet teagettett ggettgeeet ttgetgaget
                                                                      300
ctttgccctc catgtcatgt gtgggcagac cattttcatc aaacttggag tatttgtcgg
                                                                      360
tttctgacaa gaacatctca ctggggggaa tcttcatctt ggccagcttt gctgcttctt
                                                                      420
gttcctgttt cctccgggcc gcctcctctt tcttcttcct cttctcctct tcaacccgtc
                                                                      480
tettttette tetetettt aataaggtgt ttetgtetae eagttteaee aetgtgggea
                                                                      540
gtccttcgtg gtcttcaaac cgcaccccaa gctcgggcag gatgttgtcc cgcagggcat
                                                                      600
egetgagetg cagaatetea gggaettttt geteteggge aatetteege acteettete
                                                                      660
ggaattctga taacacctga aggtagggca tgactgtggc ctcgaaactg aggcatgtta
                                                                      720
ccagcccata cgaaccggaa atngccagag agctgtcctc ttctaccgqc cccaaaqatc
                                                                      780
tcacacatat ggtgaggtac aaggcgatgt tcttcaacaa gagctgggtg ggaccttttc
                                                                      840
cttcacq
                                                                      847
     <210> 3347
     <211> 648
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (639)...(287)
     <223> similar to gill196431 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3347
tttttttttt ttatttctgc tagtcacaaa gcccaacttt ttattgaagt ataacataca
                                                                       60
cacagaaaag tgcccagatc aaaagtgtac agctccaaga atgttcacaa acggaaagca
                                                                      120
cccaggtaac cgggcaacca gatcaagaaa cagaacaccc caggaagcac cacctcatgc
                                                                      180
ccccttctgg ttactgtctt cttagggact gatctctact tggcaaccgc atgggatgga
                                                                      240
attttggctg ggttttaaac tttatataaa tggaatccta tggtgcattt ttgccttatc
                                                                      300
```

```
tegttcaaca ctagggttgg tgaatacact ccaagttggg ggtggagttg cagetcatte 360 ccattgeagt etgggattee ategtgtgaa tatacectaa tgtgettate cagecaacat 420 gggcattggg gtgettteet gtteggggtt attatggaga gtgtttttgt gaagatttag 480 ageatgteet tggatgaaca catgtacaca tttetgtagg gtatacacet aggggtggaa 540 ttgttaggte atatatattt acatecaact caagetettt catgaaagaa gaaagaatgt 600 actggatgga gtttgetgge teaaagaatt gacagaaaac tagaaggg
```

```
<210> 3348
<211> 4205
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4206)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(2067)
<223> similar to gi4240265 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3348 ggagaactcc accgggctat gcgaacagaa tcctgcgaag aggatggcat tccctgtgga 60 tatgctggaa aattgcagcc atgaggaatt ggaaaattct gctgaagatt acatgtcaga 120 tttaaggtgt qgggaccctg aaaatccaga gtgtttttct cttctcaata ttacgattcc 180 tattagcctg tcaaatgtag gctttgtacc tctttatggt ggagatcaga cccagaaaat 240 tettgetete tttgcacetg aagatteact gacagetgtg geactttace ttgetgatea 300 gtggtgggct attgatgata ttgtgaaaac atctgttcct tcaaqaqaqq qqcttaaqca 360 ggtgagcact cttggggaga gagtggttct gtatgttctg aatcqaatta tttatagaaa 420 acaggaaatg gagagaaatg agatcccatt cctgtgtcat agcagtactg attatgctaa 480 gattctgtgg aagaaaggag aggccattgg gttttattca gttaagccta caggaagcat 540 atgtgcctct tttcttaccc aaagttacca attgccagtt cttgatacaa tgtttctaag 600 aaagaaatac agaggtaaag attttgggct tcacatgctg gaggactttg ttgattcctt 660 tacagaagat gcgcttggct tgcggtatcc actgtcttct ctcatgtata cagcttgcaa 720 gcaatacttt gagaagtatc caggagacca tgaactcctt tgggaagttg aaggtgttgg 780 acactggtac cagcgaatac cagtcaccag agcattacaa agagaagcac ttaaaattct 840 agcactttct caaaatgaac ctaaaagacc tatgtctgga gaatatggtc ctgcatctgt 900 tccagaatac gaagcaagaa ctgaagacaa tcagtctagt gagatgcagc taactattga 960 ttctctaaaa gatgcctttg caagcacttc cgaaggtcat gataaaacat ctgtttccac 1020 tcatactcga agtggtaatc taaagcggcc aaagattgga aagcggtttc aggattctga 1080 atttagcagt tctcaaggtg aagatgaaaa gacctcccag acttcactta cagcttcaat 1140 aaacaaattg gagtctactg cacgcccatc agagagctca gaagaattcc tggaagaaga 1200 acctgaacag agagggattg aatttgagga tgaaagcagt gatagagatg cacqgccagc 1260 actggaaacc cagccacagc aagagaagca agatggtgaa aaggaatctg aattagagcc 1320 tatgaatggt gagataatgg acgattetet taagacetea ettataacag aagaggaaga 1380 ctccactagt gaagttttag atgaagaatt aaaattgcag ccttttaatt ccagtgaaga 1440 ctctacaaat cttgttccac tggtggtaga atcttcaaaa ccccctgagg tagatgcacc 1500 agataagacc ccacgtatac ctgactcaga aatgttgatg gatgaaggca catctgatga 1560

```
aaaggggcac atggaagaga aattgtccct acttccaaga aagaaagcac atcttgggag
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tgtgatagct gaattttccg aaggaaccgg tctctgagaa tttttctcct aatactactt
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ttcttcctcc agagttcttt tgatagaggt tgaactttgn aagacgtgcc aatttttcac
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gaagtgcctg tggtagacag gcggaattta agaagaaagg ccaaagggca taaaggacct
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aaaaaatttcc aaaatttcaa tttgaactta cttactatgc agttttttqc ttccctttag
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aacgtagaat tcaccattgt ttttaatttt ccaggctatt tttggtaaat gcaatttttt
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ttccattact tataaggatc acagaaatct tttatactaa gggttttaat agtaaaactt
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gcacaaaaac agaaacttac ggtcaaaggt tcatgaagat attttggttt tggcctctta
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aattaaactg gagattttac ttttatccca acccagttaa catctatatt tcagaagtat
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gaggeteett ectaaggeat eteettaaat ettgeeacet ecetaattet acagtettat
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ttatattccc ccacagettt catctactte tgtaacteat ggagtgatte tecaateaae
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agatcttcct gcctgccggc ttatgccctt gatgtccatt tttgggtagg tttggaggtg
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gcttcaatca tcctttgatt tgtactgagt actggttgca agctggcctg ttaagtatat
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                                                                     3960
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atggg
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<211> 9831
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature

<222> (289)...(6791) <223> similar to gi3894265 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

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```
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<210> 3350

<211> 2056

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (62)...(1399)

<223> similar to gi2739460 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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<210> 3351

<211> 3247

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3249)...(973)

<223> similar to gi6002189 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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<400> 3351 ttqacgctct ggccatgggt tgtgcaaaga aagcttttta tttgagaaca cctagatact 60 tttggaaatg ttcttgttgg atcacaaaca acctaattga cagtctatcg ccaacatcca 120 caaacacagc aaacagtcca gtcctgcaga ccacacaggg tacatctaga gggttctact 180 tgcatcaccc acacttccac tcctgtgaaa caactgtctt gggcatgaga agggccagga 240 taggccaggt gaatggcagg ctgcccaaca accccaatcc caaaccaacc tcccaggcca 300 tgggcccaag tccctgcagg aagatgctaa taggtacaac aggtagaaca tgtagacaca 360 aacatctagt ttatttttt ctgactgtaa ccaaagtcag caaaagaaac aacaaaactt 420 caagtgccct aagaaatcct cctggattca atgacaacac atcaatggcc gggcacaggg 480 ttggattcct tttatgaaat caccttataa tctctcatca tcccagggac agtgcctttt 540 gggactgcat gaatctttaa tagctacacc acattttctc atcctttaag ttatgacaga 600 caggitatet etetecaaga geateaggit aggatgetet tieaetetta caaactgica 660 ggtgggaggg ggaatcaccg acatcatttc attaaataac tgtgggagtc tggggatgct 720 gggctggaag gcatctccag gggagggact gggaggggcg attttgctaa aaggggctgc 780 840 gaccatgtaa tcacagagat tagagctccc tgtgaaattc aatcactgcc tttaggatct 900 cccacaaaga cctggtcctc ccaatagcac atgcgtttcc tctgtgagct gtattcgcat 960 ccagcgccgg agccctcaga aagaatgcgt gtttacactc tgtactctcc aatgggtaat 1020 atttatcata gaaatctaat acatattctt cagtcttgaa tccaaacttc tggtacagta 1080 gcatageggg gttgettget gagaegtaaa gegeteaegt eettgeeeat geaggtetga 1140 atcagatgat agatcatgaa agttgcaatc cctgctcttc tccattcagg gtggacgaac 1200 agaaatgaaa tgtaagcttc attgtatttc acatcaggaa ccatgaagcc aaaggcaatg 1260 atgacttttt tataaagaac aacaacactg aagtctgggt actgcagaca ctcagcacag 1320 gtcaatgcca ggccaaaaaa actcctgaca catggagttg atcgttggga tgtgatttgg 1380 ccgcacataa cagtaatcga gaggtgcgtc gggctccggc gtccagtgag ggtcgctcct 1440 gatataaggt ttcaagatcc gagaggtata agggctgaca atactctggt ccacagccat 1500 atettetgat eetaccaage gatacaaaaa ettggtggte etggtgteeg aaaaceette 1560 ctggacggca aaggaagtct ggtatcggtc aaggattctg aagtcctgac aggtggttct 1620 gtacgtggct tgtccagctg gaagtctgga aattcctcct tctttggctc cataaatccc 1680 qtcaactaac aaaagagcag cattaacaac ttgatccaag tcaaaaagtg gtaatcccct 1740 atcccttttc gcttgtctga caatcagttt gcgtttcagt ctccgagctt ccggagtcat 1800 ggcaacagca ccgggacaag cttccagcct cttgagcagc agcttttcct cgtagatqct 1860 cacgggagta tacctgggct ctttcggctt tgtgtccttc tccagctgag gcttcctctt 1920 ttctctagcc cttgtttgca aagatgtgtt tgaatctgtg tcttcactgt caatatccat 1980 cctgtcgggt ttttcctcct cactctctac ctcctgcttt atctgttcag ggcctctgac 2040 cttctttctg accccaacca ctggcccaga agctactgac ccagcagggg gtgggacgta 2100 ctccatccct gggtctatga ctccatcgcc ttccatctca tcgtcatcat gaaacaaggc 2160 ttgtgggggc atcacatctg gaatcagatc tgcttctgaa agcaaqctag gtgtggcaga 2220 atgagaggca ggtgtaccag gggcagagaa atccagagaa ggagaaggag atgggcttgt 2280

<210> 3352 <211> 1194

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agaccttttc tcttttaatt ccatggcaga ttccacagga ttccqacttq ctcqttttct
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                                                                     2880
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<212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1106)...(253)
     <223> similar to gi1408211 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
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                                                                   120
agactgcatc ctttggacaa taggcactaa ttttctcagt agataacttc aaggagccca
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gtgccaggga gtgatgtccc tcagcaaacc ttttggtggc agggcagtga gtttgctcac
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atcctgcatt catgataaac agtttgctgt ttgatcatat agcctccagc agaatgctga
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gttggtcacg tcccacaggc ctttggctcc ctgcatatcc ccctttctgt ttatgtatta
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attgaaagaa tgtaaggctg ggctgggagg ctctcattct ccaattggtg gtccatccga
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                                                                   600
gacctaggtg gactaaacaa aggggggtga acacgggaat aaagatgaga caaaagagtg
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tatttggaag aagggatcgg gggcgctttg cctctagggg acaagggccc tgagctttac
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cagaatgctg agtttggtca cgtcccacca ggcctttggc tccctgcata tccccctttc
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1080
qtqqtccatc cgattttaca gacttatatc tgctgccggc agactcttcc cagggtcccc
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                                                                  1194
```

```
<210> 3353
<211> 2535
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (90)...(646)
<223> similar to gi6003574 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3353 aagaagacaa aaaaggaagc tggaaataag aaatccacac cagttagcat tctttttggt 60 tatccactct ctgagcgaaa acagatggca cttcttatgc agatgacagc aagagacaac 120 agtccagatt ccacaccaaa tcatccatca caaacaacgc ctgcccaaaa gaaaactccc 180 agttetteat etegacagaa agataaagtt aataaaagaa atgaaegtgg tgaaaeteet 240 ttacacatgg ctgctattcg aggagatgtg aaacaagtta aagaattaat aagtttaggg 300 gcaaatgtga atgtgaaaga ttttgcaggt tggacaccac tgcatgaagc ttgcaatgtt 360 ggatattacg atgttgctaa gatacttata gcagctggag cagatgttaa cacacaagga 420 ttagatgatg acactccact ccatgattct gctagtagtg ggcacagaga tatagtaaag 480 ctgttacttc gtcacggtgg aaatccattt caagctaata aacatgggga gcgtccagtg 540 gatgtagcag aaacagagga gttggagttg ctactaaaaa gagaggtgcc tttatctgat 600 gatgatgaaa gttacacaga ttccgaagag gctcaatctg taaatccttc tagtgttgat 660 gaaaatattg actctgaaac agagaaagac tctctcatct gtgaaagtaa acagatactt 720 cccagtaaaa cacctcttcc atctgccctt gatgagtatg agttcaaaga tgatgatgat 780 gaagaaatta ataagatgat tgatgatagg catattctta ggaaagaaca acgaaaagaa 840 aatgaacctg aagcagaaaa aactcattta tttgcaaaac aggagaaagc cttctatcct 900 aaatcattta aaagtaaaaa acaaaagcca tctagggtct tatattcaag tactgaaagt 960 tctgatgaag aagctcttca gaataaaaag atttctactt catgttccgt catccctgaa 1020 acatcaaatt ctgatatgca aaccaaaaag gaatatgtag tttcaggtga acacaaacag 1080 aaaggcaaag ttaaaagaaa attgaaaaat cagaataaaa ataaagagaa ccaagagcta 1140 aagcaagaaa aggaaggaaa agaaaataca agaataacaa acttgacagt aaatactgga 1200 ctagattgtt cagaaaagac cagagaggag gggaacttta ggaaatcttt tagcccaaaa 1260 gatgatactt cattacattt atttcatatt tccactggta aatctcccaa acattcttgt 1320 ggattaagtg aaaaacagtc aacaccacta aaacaagaac atactaaaac atgtttatca 1380 ccaggaagtt ctgaaatgtc attacagcct gatcttgttc ggtatgataa tacagaatct 1440 gaattcttgc cagaaagttc aagtgtaaaa tcttgtaagc ataaggaaaa aagcaaacat 1500 cagaaagatt tccacttaga atttggtgaa aaatcaaatg ccaaaataaa ggatgaagat 1560 catagtccaa catttgaaaa ttcagattgc acactgaaaa aaatggataa agaaggtaaa 1620 acattaaaaa aacataaatt gaagcataaa gagagggaaa aagaaaagca taaaaaagaa 1680 attgaaggtg aaaaggaaaa atacaaaact aaggatagtg ccaaagaact gcagaggagt 1740 gtggaatttg atagagaatt ttggaaagag aatttttta aaagtgatga aactgaagat 1800 ctctttttaa atatggaaca tgaatcctta acattagaaa aaaaatcaaa attggaaaaa 1860 aacatcaaag atgataaatc aaccaaggaa aagcatgtgt caaaagagag gaactttaaa 1920 gaggaacgag acaagattaa aaaggaaagc gagaaatctt ttagggagga aaaaataaaa 1980 gatctaaaag aagagagaga aaacataccc acagataaag actcagaatt tacttctttg 2040 ggtatgagtg ccattgagga atctataggg cttcatttag tggaaaagga aatagacatt 2100 gaaaaacaag aaaagcatat aaaggaaagt aaagaaaaac ctgagaagcg atctcaaatt 2160 aaagaaaagg acattgagaa gatggaaaga aaaacctttg aaaaagaaaa qaaqataaaa 2220

```
catgagcata agtcagaaaa agacaaatta gatcttagtg aatgtgttga taaaaaaaaa 2280 aaaaaaggaca agctatattc gcatcacaca gaaaaatgcc ataaagaagg tgagaagagc 2340 aaaaatactg ctgctattaa aaaaactgac gacagaaggg aaaagtagag aaaagatgga 2400 taggaaacat gacaaagaaa agcctgaaaa agagaggcat ctagcagaaa gcaaagaaaa 2460 gcacttgatg gagaaaaaaa aataaacaat cagataatag tgaatacagt aaatcagaaa 2520 aaggcaaaaa aaaaa
```

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<210> 3354
<211> 7399
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(6150)
<223> similar to gi2224543 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3354 aagcggcctg tatagataca ggagcaggaa ctctaggaca gccctgagtg aagaggagga 60 ggaagaacgg gagttcagaa aacagttccc cctgcatgaa aaggactttg cagatatttt 120 ggtgcagcca acgttggagg agaacaaagg aacttcagat gggcaagaag aggaagcagg 180 cacaaaccca gctctcctct cccagaattc aatgcaggca gtaatgctga tacaccagca 240 attgtgtctc aactttgctc gatccctctg gtatcaacag actctgccgc cacatgaagc 300 aaagcattac ctcagcctgt ttctgtcttg ctatcagact ggggcatcgc ttgtgacaca 360 cttctacccc ctgatgggag ttgaactgaa tgaccgactc ttgggcagcc aacttttggc 420 ctqtaccetc teccataaca etettttgg ggaggeacee teagacetga tggtgaaace 480 tgatgggccc tatgacttct accagcatcc caatgttcca gaagcacggc agtgtcaacc 540 tgtgcttcaa ggtttctcag aggctgtcag tcacttgcta caggactggc cagaacaccc 600 agcgcttgaa cagctcctgg ttgtaatgga cagaattcgt agtttcccac tttccagtcc 660 catctcaaag ttcctgaatg gcttagagat ccttctggca aaggcacagg attgggagga 720 aaatgcaagt cgagctttgt ctttgcggaa acatcttgat ttgatcagtc agatgatcat 780 tcggtggcgt aaactggagc tgaactgctg gtccatgagt ttggataata ctatgaagcg 840 ccacaccgag aaatccacca agcactggtt ctccatctat cagatgcttg agaagcacat 900 gcaggaacaa acagaagaac aggaagatga caaacagatg accttgatgt tgctggtcag 960 cacattacaa gcatttattg aaggatcctc gctqqqaqaq ttccatqtqc qacttcagat 1020 gttactggtt ttccattgtc atgtcttgct gatgccacag gttgaaggaa aggattcact 1080 ttgcagtgtt ctatggaatt tgtaccatta ttacaagcaa ttctttgacc gggtccaggc 1140 caaaattgtg gaacttcgtt ccccctaga aaaagaactt aaagaatttg ttaagatttc 1200 caagtggaat gatgtcagct tctggtccat taagcaatct gtagaaaaga cacacaggac 1260 actctttaaa ttcatgaaga aatttgaagc agtcctgagt gaaccctgcc ggtcatccct 1320 ggtggagagt gacaaggaag aacagcctga ctttttgccc aggccaacag atggagctgc 1380 aagtgaactg tcttccattc agaatctgaa cagggcactg agggagaccc tgttagccca 1440 accagcaget gggcaggcca caattccaga gtggtgtcag ggcgctgctc cttccggctt 1500 ggaaggggag cttctgcgtc gcttgccaaa gctcaggaaa cgcatgagga agatgtqcct 1560 gacgttcatg aaggagagcc ccctgcctcg ccttgtggag ggccttgatc agttcacagg 1620 tgaagtgatt tcctctgtga gtgagctgca gagcttaaag gtggaaccct ctgcagagaa 1680 ggagaagcag cggtcagaag ccaagcacat tctcatgcaa aaacagcgag ctttgtcaga 1740 cctctttaaa caccttgcaa aaattggttt gtcgtatcgc aaaggtcttg cttgggcccg 1800 ttcaaaaaac cetcaagaga tgetteatet teacecatta gatetecaga gegeattgte 1860

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cctgtgcctt gaggagatgc tgccaggagc atgggactct gacagtcctt tgtataaagg
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actaaaggga gctgcccttt tgaccctgtt ctaagctctg ccttgccaag cccatagtgt
                                                                    6600
gtgcccaaaa gctgtcaagt ggccaagaca gctcgtttct ggagagtatg aqqqtqtqtt
                                                                    6660
ttcttattgt gaaaggaact accttctctt agagggtagg aagaatgtgg gtgtgtgtt
                                                                    6720
gttctcataa agcaactgga cattataggt gcccaggtca tctataaaaa cgatccttqg
                                                                    6780
gctgtgtaaa aatgaagtgg cttttcagta tcctctttca cacttgctgc ttcgggagac
                                                                    6840
tatgcaatga tgggaaggtg attgcccctt tatttcattc agtgccatgg tccctgttgt
                                                                    6900
tgtagtaatt tatttgttta gttcattttt tttttctta acagtcaagg ggaagagtga
                                                                    6960
ttcctcacac tgctttcaag ctggactgag ccagtctcat tctgggaaag aaacgctgtg
                                                                    7020
tccagaactc agcagctcca tctatttttt ccagtcgaaa aaaactgatc tatctttagg
                                                                    7080
cagtttttac ttggccagaa agcagtgctg aatacttgaa actgggggct ctgttcctac
                                                                    7140
ttaatgttct gtccagaatg ttccttttgt aggcagtatg tccatgatgt aatcatccta
                                                                    7200
tctccttgtc tgtttcccaa gttacactgt gaagtctgcg acccttttga ggtggtcatc
                                                                    7260
aaagacacag attoottgtt taaccaagtg toocaaagca tgtacotgaa gttatatoat
                                                                    7320
tttttattct aaaaagctat gcagcttata ttctgaaaac tattaaaaca tataccactg
                                                                    7380
ttgttgatgt aaaaaaaa
                                                                    7399
```

```
<210> 3355
<211> 1380
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (119)...(1000)
<223> similar to gi577276 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3355
tatatcaaca ttgatataga tccagggtac ttaaaaacag ccttaggcct ttatagaagc 60
```

```
tgcctgctca ccgaaaataa gatccgctcc ctaatataca atgccttgaa tcccatgcat
                                                                      120
aaagagattt cccagaggtc cacagccaca atgtatataa ttggaggcta ttactggcat
                                                                      180
cctttatcag aggttcacat atgggatcct ttgacaaatg tttggattca gggagcagaa
                                                                      240
ataccagatt ataccaggga gagctatggt gttacatgtt taggacccaa catttatgta
                                                                      300
actgggggct acaggacgga taacatagaa gctcttgaca cagtgtggat ctataacagt
                                                                      360
gaaagtgatg aatggacaga aggtttgcca atgctcaatg ccaggtatta ccactgtgca
                                                                      420
gtcaccttgg gtggctgtgt ctatgcttta ggtggttaca gaaaaggggc tccagcagaa
                                                                      480
gaggctgagt tctatgatcc tttaaaaagag aagtggattc ctattqcaaa catqattaaa
                                                                      540
ggtgtgggaa atgctactgc ctgtgtctta catgatgtta tctacgtcat tggtggccac
                                                                      600
tgtggctaca gaggaagctg cacctatgac aaagttcaga gctacaattc cgatatcatc
                                                                      660
gaatggagcc tcatcacctt cagtccacat ccagaatatg gattgtgctc agttccgttt
                                                                      720
gaaaataagc tctatctagt cggtggacaa actacaatca cagaatgcta tgaccctgaa
                                                                      780
caaaatgaat ggagagagat agctcccatg atggaaagga ggatggagtg cggtgccgtc
                                                                      840
atcatgaatg gatgtattta tgtcactgga ggatactcct actcaaaggg aacgtatctt
                                                                      900
cagagcattg agaaatatga tccagatctt aataagtggg aaatagtggg taatcttccc
                                                                      960
agtgccatgc ggtctcatgg gtgtgtttgt gtgtataatg tctaattgaa tctgcagaaa
                                                                     1020
tgaccaagca atcacttttt tggagtatag ttttataaaa aaagaatgca gggtttgaag
                                                                     1080
ttccttacct gataattgtg tctggcacat gataqgggat cagtaaattg taattcctaa
                                                                     1140
ccctactgta ctcccaaaca tggtgattca tggtcaagaa aaatcttata tatatatatg
                                                                     1200
tacacacata tatatgtgtt catatatatg tatacatata tgtgtatata tacgcatgta
                                                                     1260
tgtatacata tatgtgtata tatgcgcatg tatgtatgca tatgtgtgta tatatgcgta
                                                                     1320
tgtatgtata catgtgtgta tatatacgta tgtatgtatg catatgtgtg tgtatatacc
                                                                     1380
     <210> 3356
     <211> 3479
     <212> DNA
     <213> Homo sapiens
     <220>
    <221> misc_feature
     <222> (1)...(3480)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (1)...(2095)
     <223> similar to gi5262681 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3356
cccaactgtg tcaaccgaga tctgatagac aaggcagcaa tggatttttg catgaacatg
                                                                       60
aacacaaaag caaacaggaa gaagttggta cgggcactct tcatagttcc tagacaaagg
                                                                      120
ttggatttgc taccatttta tgcaagattg gttgctacat tgcatccctg catgtctgat
                                                                      180
gtagcagagg atctttgttc catgctgagg ggggatttca gatttcatgt acggaaaaag
                                                                      240
gaccagatca atattgaaac aaagaataaa actgttcgtt ttataggaga actaactaag
                                                                      300
tttaagatgt tcaccaaaaa tgacacactg cattgtttaa agatgcttct gtcagacttc
                                                                      360
tctcatcacc atattgaaat ggcatgcacc ctgctggaga catgtggacg gtttcttttc
                                                                      420
```

480

540

600

agatctccag aatctcacct gaggaccagt gtacttttgg agcaaatgat gagaaagaag

caagcaatgc atcttgatgc gagatacgtc acaatggtag agaatgcata ttactactgc

aacccacctc cagctgaaaa aaccgtgaaa aagaaacgtc ctcctctcca ggaatatgtc

```
cggaaacttt tgtacaagga tctctctaag gttaccaccg agaaggtttt gagacagatg
                                                                      660
cgaaagctgc cctggcagga ccaagaagtg aaagactatg ttatttgttg tatgataaac
                                                                      720
atctggaatg tgaaatataa tagtattcat tgtgtagcca acctcttagc aggactagtg
                                                                      780
ctctaccaag aggatgttgg gatccacgtt gtggatggag tgttagcaag gtattcqatt
                                                                      840
aggaatggag gttaatcaac ctaaatttaa tcagaggcgc atcagcagtg ccaagttctt
                                                                      900
aggagaactt tacaattacc gaatggtgga atcaqctgtt attttcagaa ctctgtattc
                                                                      960
ttttacctca tttggtgtta atcctgatgg ctctccaagt tccctggacc cacctgagca
                                                                     1020
tetttteaga attagaeteg tatgeaetat tetggaeaca tgtggeeagt aetttgaeag
                                                                     1080
aggttccagt aaacgaaaac ttgattgttt ccttgtatat tttcagcgtt atgtttggtg
                                                                     1140
gaagaaaagt ttggaggttt ggacaaaaga ccatccattt cctattgata tagattacat
                                                                     1200
gatcagtgat acactagaac tgctaagacc aaagatcaaa ctctgtaatt ctctggaaga
                                                                     1260
atccatcagg caggtacaag acttggaacg agaattctta ataaaactag gcctagtaaa
                                                                     1.320
tgacaaagac tcaaaagatt ctatgacaga aggagaaaat cttgaagagg atgaagaaga
                                                                     1380
agaagaaggt ggggctgaaa cagaagaaca atctggaaat gaaagtgaag taaatgagcc
                                                                     1440
agaagaagag gagggttctg ataatgatga tgatgaggga gaagaagagg aggaagagaa
                                                                     1500
tacagattac cttacagatt ccaataagga aaatgaaacc gatgaagaga atactgaggt
                                                                     1560
aatgattaaa ggcggtggac ttaagcatgt accttgtgta gaagatgagg acttcattca
                                                                     1620
agctctggat aaaatgatgc tagaaaatct acagcaacga agtggtgaat ctgttaaagt
                                                                     1680
gcaccaacta gatgttgcca ttcctttgca tctcaaaagc cagctgagga aagggccccc
                                                                     1740
actgggaggt ggggaaggag aggctgagtc tgcaaacaca atgccgtttg tcatgttaac
                                                                     1800
aagaaaaggc aataaacagc agtttaagat ccttaatgta cccatgtcct ctcaacttgc
                                                                     1860
tgcaaatcac tggaaccagc aacaggcaga acaagaagag aggatgagaa tgaaaaagct
                                                                     1920
cacactagat atcaatgaac ggcaagaaca agaagattat caagaaatgt tgcagtctct
                                                                     1980
tgcacagcgc ccagctccag caaacaccaa tcgtgagagg cggcctcgct accaacatcc
                                                                     2040
gaagggagca cctaatgcag atctaatctt taagactggt gggaggagac gttgatccag
                                                                     2100
cagcacgtgt catttcatta ggtcctgtat ctgatgttgt ggttagtgga gtcctccagc
                                                                     2160
aattgaatga gagcagtgga cacatctcag caggtcggtc tagagagttg cgaatctaaa
                                                                     2220
cctgggacag gctggggcca ggaggcagaa acaccagcct ctgccaacac cggaacaagc
                                                                     2280
cgacgcttcc agacaaggcg gaaaaggcct tttgtaatgg aaatctcgcg agggttaatc
                                                                     2340
ttctcttgag aatggcagtc aagaaatgag atggttcact tgactactga gcagttacac
                                                                     2400
caaggagagc gtgaaggaga tgattgagcc agagaagaaa cgggttgtga tggtaatggt
                                                                     2460
gtgggggaaa tgaacttgag ctttaaactt gatttgagtt tcagtgtctc tgaattgaac
                                                                     2520
atcccacgtt ggaagaagat acatttgggg gctccaggac tacagtagaa aagtatagag
                                                                     2580
caagcaggaa aatcttctag taaaacttac atgcaggaca acaaaatgat gaaagatatc
                                                                     2640
caaataccag ataatccacc aggaaggctt ttgtttagga atttgtttca agaggaacaa
                                                                     2700
gggatgaggg agaaaaatcc gttttatcca tcagagtcag tgctataaaa ttgcctatta
                                                                     2760
aggtaaaaga aaaatgtgga gactatttta ctatacagag agcattaatt cagatggctt
                                                                     2820
agaaaagtga taccagccca agaacaggga tctaggtgag cccattgtaa gtatcattga
                                                                     2880
aaacaaaaca tgcccgtcaa catgtcacag aaaacgaacg aaggacaaca agaagtggat
                                                                     2940
gagaatattt tgttgacctt catgggttta cagcctctgt ctctaaacaa agtatggaaa
                                                                     3000
caagtagage ttttattttg cttttgtttt tgttttgttt ttttttttgt tttcccccac
                                                                     3060
taaatagaaa tgagggtcct tagtctgttt ctgacaatct gttaatttct taggacagct
                                                                     3120
gtctttggtt tgctttccag caggcgtagt atatttagtc ggagagcaca tctgtatgcg
                                                                     3180
acaacttgat tacatctttt tttctagcta ttttgcattt tttcttttac catgtttcag
                                                                     3240
tttctgcatg tagatttaaa taaaaaacaa aacttgtaaa gttgtaacat ttcacatgga
                                                                     3300
aatgctgccc aatcttcacc agcttcagaa atctgacctt tgccgatgct gcaataaagt
                                                                     3360
gttgtaattt aaaaaaaaa acaacccatt accaaacata annttgtgcc cccctgggg
                                                                     3420
gggggctcat tttaatagcc gctcctttcc ccccctacg ttatatatgg gtttttata
                                                                     3479
```

<210> 3357

<211> 2578

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(2579)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(2204)
<223> similar to gi791043 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3357 aaactcagtg gacgacccta cagacacatg ggagtgcttg gaacttcaaa actctatgac 60 attcggaaaa ctatctttac tttcactcca cagtttatag accagcaaca gttctacctg 120 gctctggaca acaagatgat agtggaaatg cttaqaacag acctctccta cctctgtagc 180 cgctggcgga tgacaggcca gcccaccatc accttcccca tctcacacag catgcttgat 240 qaaqatggaa caagcttgaa ttcaagtatc ctggcagcac tccgaaaaat gcaagatggg 300 tattttggtg gggcaagggt tcaaacaggt aaattgtcag agtttttgac aacatcttgt 360 tgcacacact tgagcttcat ggaccctgga cctgagggta agctgtacag tgaagattat 420 gatgacaact atgattacct ggaatctggc aactggatga atgattatga ttcaaccagt 480 catgctcgct gtggtgatga agttgctcgt tatttagatc accttttgqc qcacactqct 540 ccccatccta aactagcccc tacctcacag aagggagggc tagatcggtt ccaaqctgct 600 gtgcaaacaa cctgcgactt aatgtccttg gtgaccaagg ccaaggaact gcatgtacag 660 aatgttcaca tgtatcttcc tacgaagtta tttcaggctt cccggccttc attcaactta 720 cttgattcac ctcatccccg acaggagaac caggttccct ctgttcgtgt agaaatacat 780 cttcctagag accagtctgg ggaggtggac tttaaagcac tggttttaca gttgaaggag 840 acctcaagct tacaggaaca agctgatatc ctctatatgc tgtatactat gaaaggacct 900 gactggaaca ctgaattgta taatgaacgg agtgctacag tgagagagct tcttaccgag 960 ctgtatggca aagtgggaga aattcgtcac tggggcctga tccgatacat ttctgggatc 1020 ttaaggaaga aagtggaagc acttgatgag gcctgcacag accttctctc ccaccagaaa 1080 catttgacag taggacttcc tccagaacct cgagaaaaga ctatctctgc acctctgccc 1140 tatgaggcgc tcactcagct gatagatgaa gccagtgaag gggatatgag catttcaatc 1200 cttacacagg aaataatggt atatctagcc atgtatatgc gaacccagcc tggcctcttt 1260 gctgaaatgt ttcgacttcg aattggtctg atcatacaag ttatggcaac agaactggcc 1320 cactcccttc gatgctcagc tgaggaagcc acagagggcc tgatgaatct cagtccttcg 1380 gccatgaaga atctcctgca tcacattctc agcggcaagg agtttggagt ggaacgaaag 1440 ccgttcgtcc cactgattca aatgtcagtc ctgctatttc tatccacgag attggtgctg 1500 ttggagcaac caaaacagaa cgaactggga tcatgcagtt aaaaagtgag ataaagcagg 1560 tggaatttcg tagactgtca atctcagctg agagtcagtc acctggaacc tctatgactc 1620 caagtagtgg gtcctttcct agtgcatatg atcagcagtc atctaaagat agtcgtcaag 1680 gtcaatggca acgccgaaga aggctggatg gggcactgaa tagagttcca gttggatttt 1740 atcagaaagt atggaaagtt ttgcagaagt gtcacggact ttctgttgaa gggtttgtcc 1800 tteetteete taeeactaga gagatgaete eaggtgagat taaattetet gtteatgtgg 1860 agtettgtee tgaatgtgtt aettegeeca gagtaeegte agetgetggt tgaageeate 1920 cttgtcctca ccatgctggc agatattgaa attcatagca tcggaagcat cattgctgtg 1980 gaaaaaatag tgcatattgc caatgacttg ttccttcaag aacagaaaac ccttgggcnc 2040 agatgatacc atgttggcaa aggatcccgc atctgggcat ctgtactctt cgggtatgac 2100 agtgcaccca gtggcaggtt tggcaccatg acctacctct cccagggcag ccggccacct 2160 acgtgcagga gttcctgccc ccacagcatc tgtgccatgc aatgagggct ttggttcctg 2220 gcttctggga gccttttgac agctggtccc tgcctcgggt ggattgtgca tggaactaaa 2280 atgttattgc ctaaccaatc caaccegtge ecetttetgt eceateette ccaagaagag 2340 agaacttttt cgataaacta actactgtag aagaagtgaa cacttacctg gaggctcacc 2400 ttgcagaacc agtgacaatc ttatgagtat aatgaacact cagccaggcc tgtcatgatt 2460

```
ggctttattt ctttcatcat tcataaaagt ttgcatgtgt ttttattctc tagatctgtt
accaatatag ttttctaact cctgtttggg gagcaagtgt taaaaaaaac ttattcct
                                                                     2578
     <210> 3358
     <211> 342
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (344)...(24)
     <223> similar to gi699581 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3358
cttgagtaca cagaccaggg tatgcgggca cgtgagaggc tgctgatgat ttatatcttc
                                                                       60
cattgtgagg gaggacttgc ttggtcttat aatatctagc caaacatgtg aatccggctc
                                                                      120
tctataacaa tcacacggaa cttatgatcc ttatactttc tgatcctatc aagatgcttt
                                                                      180
cgaacagcaa ctgctttctt aagtacttgg tgcagatctt caagaagatc aggagcatga
                                                                      240
tccttagact taagaattct tagcatgata ttgcctgtca caaaacgtac ttgtgcaaca
                                                                      300
ccatgtgaat ctctcatgat tacaccgatc tgtgaaggag ta
                                                                      342
     <210> 3359
     <211> 2666
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2666)
     <223> similar to gi5257005 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3359
ggatcacctg gcaaaaagga agagaaggcc aagaacaaag aatcactttg catggaaaac
                                                                       60
agtagcaaca gctcttcaga tgaagatgaa gaagaaacaa aagcaaagat gacaccaact
                                                                      120
aagaaataca atggtttgga ggaaaaaaga aaatctctac ggacaactgg tttctattca
                                                                      180
ggattttcag aagtggcaga aaaaaggatt aaacttttaa ataactctga tgaaagactt
                                                                      240
caaaacagca gggccaaaga tcgaaaagat gtctggtcaa gtattcaggg acagtggcct
                                                                      300
aaaaaaacgc tgaaagagct tttttcagac tctgatactg aggctgcagc ttccccaccg
                                                                      360
catcctgccc cagaggaggg ggtggcagag gagtcactgc agactgtggc tgaagaggag
                                                                      420
agttgttcac ccagtgtaga actagaaaaa ccacctccag tcaatgtcga tagtaaaccc
                                                                      480
attgaagaaa aaacagtaga ggtcaatgac agaaaagcag aatttccaag tagtggcagt
                                                                      540
```

```
aatttcagtg cttaaatacc ccttccttac ttacacctga atcgccttca tcagtcactg
                                                                      600
taacagaaag gcagccggca gcagtcttct gtaacagtat cagaaccact gqctccaaac
                                                                      660
caagaagagg ttcgaagtat caagagtgaa actgatagca caattgaggt ggatagtgtt
                                                                      720
gctggggagc tccaagacct ccagtctgaa agggaatagc tcgccagcag gttttgatgc
                                                                      780
cagtgtgagc tcaagcagta gtaatcagcc agaaccagaa catcctgaaa aagcctgtac
                                                                      840
aggtcagaaa agagtgaaag atgctcaggg aggaggaagt tcatcaaaaa agcagaaaag
                                                                      900
aagccataaa gcaacagtgg taaacaacaa aaagaaggga aaaggcacaa atagtagtga
                                                                      960
tagtgaagaa ctttcagctg gtgaaagtat aactaagagt cagccagtca aatcagtttc
                                                                     1020
cactggaatg aagteteata gtaceaaate teeegeaagg aegeagtete eaggaaaatg
                                                                     1080
tggaaagaat ggtgataagg atcctgatct caaggaaccc agtaatcgat tacccaaagt
                                                                     1140
ttacaaatgg agttttcaga tgtcggacct ggaaaatatg acaagtgccg aacgcatcac
                                                                     1200
aattottoaa gaaaaactto aagaaatcag aaaacattat otgtoattaa aatotgaagt
                                                                     1260
agcttccatt gatcggagga gaaagcgttt aaagaagaaa gagagagaaa gtgctgctac
                                                                     1320
atcctcatcc tcctcttcac cttcatccag ttccataaca gctgctgtta tgttaacttt
                                                                     1380
agctgaaccg tcaatgtcca gcgcatcaca aaatggaatg tcagttgagt gcaggtgaca
                                                                     1440
gcaggacttg ctaaagcact ttgcacttaa tggctgttga gggccacttt ttttttatac
                                                                     1500
tgcacagtgg cacaaaaaaa tatcagacaa gcactatttt atatttaaaa attgtttctt
                                                                     1560
gacaagctga cttggcactt aagtgcactt ttttatgaag aaaaagtaca atgaactgct
                                                                     1620
tttcctcaag caataattgt ttccaacttg tctgggaatt gtgtgtctgg taactggaag
                                                                     1680
gccttccact gtggcaaatg gaggcttttc actgcctgta gagacaatac agtaagcata
                                                                     1740
gttaaggggt gggtcagaac atgttaagat aacttactgt atatgtattc ccttgtattt
                                                                     1800
tgttaaagct ggaacatttg atattttcc atttatttat gaaaaaatat gaacctattt
                                                                     1860
tcatttgtac aaggtaattg ttttttaaag caagtcacct tagggtggct ttaattgtat
                                                                     1920
aagtcaagca catgtaataa attcaaaacc tgcagttaac aggatattag acatcaatcc
                                                                     1980
tggtaaccaa atattaaaga ttctctttaa aaaagactga acatgtttac aggtttgaat
                                                                     2040
taggctaaaa ggtcttgcag tggcttttca tggcccttca aattggaatg gaactactgt
                                                                     2100
actttgccat ttttctataa atcagtattt ttttttaatt ttgatataca ttgtgtgaaa
                                                                     2160
aaagaaaatg gctaataaac tgtattaaat cttaaacaat gtataaagat tgtacttagc
                                                                     2220
cagttcaaag tgtatattta ttcataatga attataacag ttatattttt gtgttttctt
                                                                     2280
gtaaatgttt cttttccctt aaatacagat aattcatttg tattgcttat tttattatga
                                                                     2340
gctacaacaa aaggacttca ggaacaagta atgtattagt atggttcaag attgttgata
                                                                     2400
ggaactgtct caaaaggatg gtggttattt taaatataaa tagctaatgg gggtggtagg
                                                                     2460
cctataaaat taaatgcctt gtataaaatc caaaatgaat gcaaaattgt tttcacttgt
                                                                     2520
attgacttta tgttgtatga ttccaatctc tgttctgttt ggcacttgta tttaattctt
                                                                     2580
cacctttgta agacatttgt atattgtgca tgtgttcatt caagctattt aatatctggc
                                                                     2640
actgttaata cacagtactt tattgt
                                                                     2666
```

```
<210> 3360
<211> 7502
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(6861)

<223> similar to gi3413886 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3360
cgagcacagt gtatctggcc ggagcagtgc ttatggcgat gctacagctg aggggcatcc 60

```
ggctggacca ggaagtgtca gctcaagcac tggagccatc agcaccacca ctgggcacca
                                                                     120
ggagggagat ggctccgagg gagaaggaga aggagaaact gaaggagatg tccacactag
                                                                     180
caacaggctg cacatggtcc gtctaatgct gttggagaga ttactgcaga ccctqcctca
                                                                     240
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<210> 3362

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qc
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<210> 3361
     <211> 187
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(180)
     <223> similar to gi344422 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3361
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<211> 3307
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2408)
<223> similar to gil230564 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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ctgcgaaagc aaaccgagga gaaagagaaa aaagagaagc caaaatctga taagactgaa
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gagccttctg aagttgacat gaattctcct aaatccaaaa aggcaaaaaa agaaagagga
                                                                      300
qccatctcaa aatgacattt ctcctaaaac caaaagtttg agaaagaaaa aggagcccat
                                                                      360
tgaaaagaaa gtggtttctt ctaaaaccaa aaaagtgaca aaaaatgagg agccttctga
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ggaagaaata gatgctccta agcccaagaa gatgaagaaa gaaaaggaaa tgaatggaga
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<211> 4461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4464)...(2165)
<223> similar to gi3724141 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<210> 3364

<211> 6566

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (6567)...(1439)

<223> similar to gi4545099 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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<213> Homo sapiens

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<223> similar to gi2564332 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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```
attaggactg ggcatcattg atggggttgg actgagttga ggcattaact gtaaaattct
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gtttctggaa cccataggca cactgccttg cccacactgg agattctccc cagtctgcat
                                                                     6120
gagaggagat ggggtagaac tacagcttgg agactgaacc acagaggcag ctggagaagg
                                                                     6180
gttagaaatg gggctgaagt tctggtgaaa ctgcatgggg gacctcacag gaacctcagg
                                                                     6240
ctggttgtac tgccccactt ggctttgcag gggcagcttg gtggcagcgt tagtatactg
                                                                     6300
catcacatgc tgagaagggt gttgttgttg ctgcggttgc tgctgctgct gcccctgttg
                                                                     6360
ggtcccttgt ggaatctttg cctgttcaaa attcttcata gattgaggct gatagctgta
                                                                     6420
attggattgt gttccataag cctgtgcatt agaacccaca ttgtgtcctt catactgaga
                                                                     6480
tccagcattc acattgtaac tgccatcata gctctgtcca gactggctaa aacgctgtgg
                                                                     6540
tgaagggaag gaggag
                                                                     6556
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<210> 3366
<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(726)
<223> similar to gi4755083 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3366
tttcgtcgct gctggcggtc gggcgctcgg gcggtcctgg ccggcgagac gagttgcatg
                                                                       60
tgttggttca gctggcgata gcggcgggag cggagccggc qgggcctgtq cqaccgcctq
                                                                      120
ggtttgtgaa atggctgctg acatttctga atccagcggg gctgactgca aaggagaccc
                                                                      180
aaggaacagt gccaagttag atgccgatta cccacttcga gtcctttatt gtggagtctg
                                                                      240
ttcattacca acagagtact gtgaatatat gcctgatgtt gctaaatgta gacaatggtt
                                                                      300
agagaagaat tttccaaatg aatttgcaaa acttactgta gaaaattcac ccaaacaaga
                                                                      360
agctggaatt agtgagggtc aaggaacagc agggggaagaa gaggagaaga aaaaacagaa
                                                                      420
gagaggtgga aggggtcaaa taaaacaaaa aaagaagacc gtaccacaaa aggttactat
                                                                      480
agccaaaatt cccagagcaa agaagaaata tgtgacaaga gtatgtggcc ttgcaacttt
                                                                      540
tgaaattgat cttaaagaag cacaaagatt ttttgctcaa aaattctcct gtggtgcctc
                                                                      600
agtaacaggg gaggatgaaa ttatcattca gggaqatttt acaqatgaca taattgatgt
                                                                      660
cattcaggaa aaatggccag aggtagatga tgacagcatc gaagatcttg gagaagtaaa
                                                                      720
gaagtgaatt tgaaaatttg tctgtattta atggcctgaa ctgagagttg atatggccaa
                                                                      780
agggagagag gccttttaaa atatatatat atatacacat atatatgtat atatacacat
                                                                      840
atatgtatgt atacacatat acacatgtat atatacatgt gtgtatgtat acatgtatat
                                                                      900
acatatatac atacacatat atgtatacat atatacacat atatgtatac atatatacac
                                                                      960
atatatgtat acatatatat atattctaca gtaaaactgt agggctgtcc tcgtccttgg
                                                                     1020
cattttcact gttctgtaca aggctgcttg tttttttatt gccaaagtca aataaacggg
                                                                     1080
agactgtcat gctcatgcat gaatagaatt tagtcaaata
                                                                     1120
```

<210> 3367

<211> 326

<212> DNA

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<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (8) ... (297)
     <223> similar to gill43061 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3367
cgcqgacgcq tcgacctcta aacagcttag agccacagtt ctcaaacggc ctgcctgtct
                                                                       60
ccaagcattg gcagcagctg ctgtcctcac cttaaaagcc taaaaccatc tctacatqcc
                                                                      120
aacctaacag tttattcaac ccataacatc aaaaacatgc taactcacca cagtgtacta
                                                                      180
agtttcatct cccctcaca gcttctccaa ctgtatgctc tattcataaa aactccccaa
                                                                      240
atcaccgtgc taaccagctc tcgtctaaac ccagccatgc tcttacctga aatttctacc
                                                                      300
tgacaagacc ctgcacactt ctgtgt
                                                                      326
    <210> 3368
     <211> 399
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (135)...(388)
    <223> similar to gi1840393 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters -
     <400> 3368
ggcacgaggc ataaagtctg attotottac tgtctgcatg gagttttttc acttctgtgt
                                                                       60
ggccttggaa actgtgtcat ccttatattt gggttctggg atattgctgg tgataatctt
                                                                      120
ggtgctgcat atcggtgact ccagcccatc tcaatgacct tgcttgtatt attccattac
                                                                      180
ttggacatgg cctcctgtat tccctgagag gtcccgaccc ctttacagac atcctgcact
                                                                      240
tcagactatt tgtcggagca cggatctacc actccattgc atatttgaca cccctttccc
                                                                      300
agccaaatag agctttgaga ttttttgttg gatatggagt tacctctttc catggcttac
                                                                      360
aggttgctta aaagtatatt ggacctgtaa agaaaatcg
                                                                      399
    <210> 3369
    <211> 631
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
```

```
<222> (522)...(214)
<223> similar to gi4929553 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3369
ttttttttta cagatatcca attttttaat ttaattaaaa ctttacaatt gtatttacat
                                                                      60
aatccatgga aggagagaaa ggggatgaaa cttgaaggaa ccaggactct ggaggatgca
                                                                     120
ggatgctgtt tctctggatg agatgtactc tgccactgtg ctctctgggc actttcagat
                                                                     180
gatggggtct gagatgtctc ctcaggctgc atcagctgtc ttcagtctcc agaacagaaa
                                                                     240
gagcctgacc caggggcatc ttgggtggcc accagaacca ggtttctggg agagagttca
                                                                     300
ggactgaaga tggggcagga gctcagcatg gaaaccctgt tcctgaaggt acagcagccg
                                                                     360
gtccagtaga ataagcgtct ccaccagtgg ggcaagcagt agagccaggc tgaagaaggc
                                                                     420
caccacacgg ttctcctggg ccacgtgggc ctgaagggca gccagattca gtggcagctg
                                                                     480
gggatctagc cccactcgct gtagcccccg ctgcacatat ctgtgggatc agtcacattc
                                                                     540
agcactcagt ttggttttaa gaactgtcac ctctcactta aactttgctt gttcctaatt
                                                                     600
cagttccaac tttgctttat tttctcgtgc c
                                                                     631
```

```
<210> 3370

<211> 405

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (361)...(104)

<223> similar to gi4929731 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

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<400> 3370
ggcacgagag ctggaaaatg agcttccagg gcttgggtgg cgtcgggaca ttgccggcga 60
acctgaaagg aagcccttct gccttttctc gtgaagatgg gaatttgctt tcctgggttg 120
aacttcaaag ccacactggt gatgcaaaac ctctgaccat tgaggcctgg ctgatcacta 180
gacacgtgac ctagatgagc ttcacactgc ttgcagacaa cctctgtgcg agctgatcct 240
aacgaggaat ccaaaggctt aagatccctg ggtggcttta tcagagccag acgtaccctg 300
agccttggaa aacgaaagcc acccaatgcc agagcagtac tttttctcag aactgtgaag 360
acataaacga tactacagct gctaatgaca ctgcaattaa cagcg
```

```
<210> 3371
<211> 4357
<212> DNA
<213> Homo sapiens
<220>
```

```
<221> misc_feature
<222> (3)...(3068)
<223> similar to gi4034486 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3371 aggaaggaag caaagggaca aaaccacctc cagcagtttc tacaaccaaa attccaccta 60 taacaaatat ttttcccctg ccagagagat tctgtgaagc attagactcc aaggggataa 120 agtggcctca gacacaaagg ggaatgatgg ttgaacgacc atgccctaag qgaacaagag 180 gaactgeete atatetetge atgattteea etggaacatg gaaccetaag ggeeeegate 240 ttagcaactg tacctcacac tgggtgaatc agctggctca gaagatcaga agcggagaaa 300 atgctgctag tcttgccaat gaactggcta aacataccaa agggccagtg tttgctgggg 360 atgtaagtto ttcagtgaga ttgatggago agttggtgga catcottgat gcacagotgo 420 aggaactgaa acctagtgaa aaagattcag ctggacggag ttataacaag ctccaaaaac 480 gagagaagac atgcagggct taccttaagg caattgttga cacagtggac aaccttctga 540 gacctgaagc tttggaatca tggaaacata tgaattcttc tgaacaagca catactgcaa 600 caatgttact cgatacattg gaagaaggag cttttgtcct agctgacaat cttttagaac 660 caacaagggt ctcaatgccc acagaaaata ttgtcctgga agttgccgta ctcagtacag 720 aaggacagat ccaagacttt aaatttcctc tgggcatcaa aggagcaggc agctcaatcc 780 aactgtccgc aaataccgtc aaacagaaca gcaggaatgg gcttgcaaag ttggtgttca 840 tcatttaccg gagcctggga cagttcctta gtacagaaaa tgcaaccatt aaactgggtg 900 ctgattttat tggtcgtaat agcaccattg cagtgaactc tcacgtcatt tcagtttcaa 960 tcaataaaga gtccagccga gtatacctga ctgatcctgt gctttttacc ctgccacaca 1020 ttgatcctga caattatttc aatgcaaact gctccttctg gaactactca gagagaacta 1080 tgatgggata ttggtctacc cagggctgca agctggttga cactaataaa actcgaacaa 1140 cgtgtgcatg cagccaccta accaattttg caattctcat ggcccacagg gaaattgcat 1200 ataaagatgg cgttcatgaa ttacttctta cagtcatcac ctgggtggga attgtcattt 1260 cccttgtttg cctggctatc tgcatcttca ccttctgctt tttccgtggc ctacagagtg 1320 accgaaatac tattcacaag aacctttgta tcaacctttt cattgctgaa tttattttcc 1380 taataggcat tgataagaca aaatatgcga ttgcatgccc aatatttgca ggacttctac 1440 actttttctt tttggcagct tttgcttgga tgtgcctaga aggtgtgcag ctctacctaa 1500 tgttagttga agtttttgaa agtgaatatt caaggaaaaa atattactat qttqctqqtt 1560 acttgtttcc tgccacagtg gttggagttt cagctgctat tgactataag agctatggaa 1620 cagaaaaagc ttgctggctt catgttgata actactttat atggagcttc attggacctg 1680 ttaccttcat tattctgcta aatattatct tcttggtgat cacattgtgc aaaatggtga 1740 agcattcaaa cactttgaaa ccagattcta gcaggttgga aaacattaag tcttgggtgc 1800 ttggcgcttt cgctcttctg tgtcttcttg gcctcacctg gtcctttggg ttgctttta 1860 ttaatgagga gactattgtg atggcatatc tcttcactat atttaatgct ttccagggag 1920 tgttcatttt catctttcac tgtgctctcc aaaagaaagt acgaaaagaa tatggcaagt 1980 gcttcagaca ctcatactgc tgtggaggcc tcccaactga gagtccccac agttcagtga 2040 aggcatcaac caccagaacc agtgctcgct attcctctgg cacacagagt cgtataagaa 2100 gaatgtggaa tgatactgtg agaaaacaat cagaatcttc ttttatctca ggtgacatca 2160 atagcacttc aacacttaat caaggaatga ctggcaatta cctactaaca aaccctcttc 2220 ttcgacccca cggcactaac aacccctata acacattgct cgctgaaaca gttgtatgta 2280 atgccccttc agctcctgta tttaactcac caggacattc actgaacaat gccagggata 2340 caagtgccat ggatactcta ccgctaaatg gtaattttaa caacagctac tcgctgcaca 2400 agggtgacta taatgacagc gtgcaagttg tggactgtgg actaagtctg aatgatactg 2460 cttttgagaa aatgatcatt tcagaattag tgcacaacaa cttacggggc agcagcaaga 2520 ctcacaacct cgagctcacg ctaccagtca aacctgtgat tggaggtagc agcagtgaag 2580 atgatgetat tgtggeagat getteatett taatgeaeag egaeaaceea gggetggage 2640 tccatcacaa agaactcgag gcaccactta ttcctcagcg gactcactcc cttctgtacc 2700 aaccccagaa gaaagtgaag tccgagggaa ctgacagcta tgtctcccaa ctgacagcag 2760 aggotgaaga toacotacag tococcaaca gagactotot ttatacaago atgoccaato 2820 ttaggagact ctccctatcc ggagagcagc cctgacatgg aagaagacct ctctccctcc 2880

```
aggaggagtg agaatgagga catttactat aaaagcatgc caaatcttgg agctggccat
                                                                  2940
cagcttcaga tgtgctacca gatcagcagg ggcaatagtg atggttatat aatccccatt
                                                                  3000
aacaaagaag ggtgtattcc agaaggagat gttagagaag gacaaatgca gctggttaca
                                                                  3060
agtetttaat catacageta aggaatteea agggeeacat gegagtatta ataaataaag
                                                                  3120
acaccattgg cctgacgcag ctccctcaaa ctctgcttga agagatgact cttgacctgt
                                                                  3180
ggttctctgg tgtaaaaaag atgactgaac cttgcagttc tgtgaatttt tataaaacat
                                                                  3240
3300
gatgccagcc aggtatttta agattctgct gctgtttaga gaaattgtga aacaagcaaa
                                                                  3360
acaaaacttt ccagccattt tactgcagca gtctgtgaac taaatttgta aatatggctg
                                                                  3420
caccattttt gtaggcctgc attgtattat atacaagacg taggctttaa aatcctgtgg
                                                                  3480
gacaaattta ctgtacctta ctattcctga caagacttgg aaaagcagga gagatattct
                                                                  3540
gcatcagttt gcagttcact gcaaatcttt tacattaagg caaagattga aaacatgctt
                                                                  3600
aaccactage aatcaageca caggeettat tteatatgtt teeteaactg tacaatgaae
                                                                  3660
tattctcatq aaaaatggct aaagaaatta tattttgttc tattgctagg gtaaaataaa
                                                                  3720
tacatttgtg tccaactgaa atataattgt cattaaaata attttaaaga gtgaagaaaa
                                                                  3780
tattgtgaaa agctcttggt tgcacatggt atgaaaagat ttttcttaca ctttgtcatg
                                                                  3840
gtaagttcta ctcattttca cttcttttcc actgtataca gtgttctgct ttgacaaagt
                                                                  3900
tagtctttat tacttacatt taaatttctt attqccaaaa qaacqtqttt tatqqqqaqa
                                                                  3960
aacaaactct ttgaagccag ttatgtcatg ccttgcacaa aagtgatgaa atctagaaaa
                                                                  4020
gattgtgtgt cacccctgtt tattcttgaa cagagggcaa aagagggcac tgggcacttc
                                                                  4080
tcacaaactt tctagtgaac aaaaggtgcc tattctttt ttaaaaaaaat aaaataaaac
                                                                  4140
ataaatatta ctcttccata ttccttctgc ctatatttag taattaattt attttatgat
                                                                  4200
aaagttctaa tgaaatgtaa attgtttcag caaaattctg ctttttttc atccctttgt
                                                                  4260
gtaaacctgt taataatgag cccatcacta atatccagtg taaagtttaa cacggtttgc
                                                                  4320
cagtaaataa atgtgaattt tttcaagtaa aaaaaaa
                                                                  4357
    <210> 3372
    <211> 460
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (10)...(354)
    <223> similar to gi4689108 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

```
<400> 3372
ggcacgaggg actatccacg cattgtgaac cacctggacc acacctatgt cactgcgccc
                                                                       60
caageettea tgatgtteea gtaetttgtg aaggtggtge eeactgtgta catgaaggtg
                                                                      120
gacggagagg tactgacgac aaatcagatc tatgtgacca gacatgagaa qqctqcctat
                                                                      180
gtgctgatgg qcgaccaagg ccttcccgga gtcttcatcc tctatgagct ctcgcccatg
                                                                      240
atggtgaacc tgacggagat acacacgttc ttctctctt tcctgacaat tgtgggcgct
                                                                      300
caccataggt ggcatgttct ttgagcattt tgtcattaat tacttaaccc ataagtgggg
                                                                      360
gcttgggttc tatttcaaaa atgaaaactc tttacagggt ggccatagga ctttatatgg
                                                                      420
agtgaacttt tttatgtatt ggagtttacg ggggggctct
                                                                      460
```

```
<210> 3373
<211> 5255
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(4581)

<223> similar to gi1228035 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3373 cagaaaaatc accaaagtca cctaattcag tgaaagcaga aaaagcatcc agttatcaga 60 tgaagtcaga aaaagtacca agttcaccag cagaagcaga aaaqqqaccc aqtttactqt 120 tgaaagacat gagacagaag acagaattac aacagattgg aaaaaaaatt ccaagctcct 180 ttacttctgt ggacaaagtg aatattgaag ctgtaggggg agaaaaatgt gctctgcaaa 240 actcaccacg atctcagaag caacagacat gtacagataa tactggtgat tctgatgata 300 gtgcttcagg aattgaagac gtatcggacg atttaagtaa aatgaagaat gatgaatcta 360 ataaagaaaa ttcttcagag atggactact tagaaaatgc cactgtgata gatgaatctg 420 cattgacacc tgagcagagg ctggggttga aacaagcaga agaacgctta gaaagagatc 480 acatettteg aettgaaaaa egateaeeag aatataeeaa ttgteggtat etatgeaaae 540 tttgcttaat tcacattgaa aatatccagg gggctcataa acatataaag gagaaacgac 600 ataagaaaaa tattttggaa aaacaagaag aaagtgagct tcgttctctq ccacctcctt 660 cccctgccca cttggctgct ttaagtgttg cagtcattga attagcaaaa gaacatggaa 720 taacagatga tgacctcaga gtccgtcagg aaattgtgga ggaaatgtca aaggttataa 780 cgacattttt accagaatgt tcacttaggt tgtatggctc atctctgact agatttgctc 840 tgaaaagtag tgatgttaat atagatataa aatttcctcc caagatgaat catccagatc 900 ttctgataaa agtacttggg attttaaaga aaaatgtatt atatgtagat gtggaatctg 960 attttcacgc taaagttcct gttgtggtgt gcagagatcg aaaaagtggt ttactttgta 1020 gagtgagtgc aggaaacgat atggcatgtc tcactactga tttacttact gcccttqqca 1080 aaatagaacc tgtctttatt cccttggtgt tagcctttcg ctactgggct aagttgtgct 1140 atattgactc ccaaactgat ggtggaatcc cttcttactg ttttgcttta atqqtqatqt 1200 tttttctaca acagagaaaa ccccctcttc ttccttgctt acttggaagt tggattgaag 1260 gctttgaccc aaaaagaatg gatgactttc agctgaaggg catagtagaa gagaagtttg 1320 tgaagtggga atgtaattca agtagtgcaa ctgagaaaaa ctcaattqct qagqaaaaca 1380 aagctaaggc agaccaacca aaagatgata ccaagaagac agaaacagac aaccaaagta 1440 atgecatgaa ggaaaaacat ggcaaatete etttageatt ggaaacacca aategggtat 1500 ccttgggaca gttatggtta gagctgctta aattctacac actggatttt gctttggagg 1560 aatatgtcat atgtgtacgg atacaagata ttttaacaag agaaaataaa aactggccta 1620 aaaggcgaat agccattgaa gatccatttt cagtcaagag gaatgttgca cggagcttaa 1680 acagccagct ggtttacgaa tatgttgtgg agagatttag ggtagcttat cggtattttg 1740 cctgtcctca gacgaagggt ggaaataagt ctacagtgga tttcaagaaa agagagaagg 1800 ggaaaataag caataagaaa ccagtcaagt cgaacaatat ggcaaccaat ggttgtattc 1860 tgcttgggga aaccacagaa aaaataaatg cagaaagaga gcaacctgtt caatgtgatg 1920 aaatggactg tacatcacag agatgtatta ttgacaacaa caatttgttg gtaaatgaac 1980 tagattttgc tgaccacgga caggactctt catctctttc taccagcaaa agcagtgaaa 2040 tagagccaaa attagataag aaacaagatg atttagcgcc ttcagaaact tgtttaaaaa 2100 aagagctcag ccaatgtaat tgcattgatt tgtctaagtc gcctgaccca gataaatcta 2160 ctggaacaga ctgcaggtca aatttagaaa cagagagttc acatcagagt qtqtqcaccq 2220 acacatctgc tacctcttgc aactgcaaag ctacagaaga tgcttctgac cttaatgatg 2280 atgataacct ccccacccag gaattatatt atgtgtttga taagtttatt ttaacctctg 2340 gcttgcagag gttcaaaata aacttatcaa acacataata tgcagcatct gcaaaaagga 2400 tggccattca aagaatgatt gcccagagga ttttaggaaa attgatttaa aacctctacc 2460

```
accaatgaca aaccgatttc gggaaatact tgatttagta tgtaaaacat gttttgatga
                                                                     2520
gttatcacca ccttgttctg aacaacacaa cagggagcaa attttaattg gcttggaaaa
                                                                     2580
gtttattcaa aaagaatatg atgaaaaggc aaggttqtqc ttatttqqct cttctaagaa
                                                                     2640
tggatttgga tttcgtgata gtgatctgga tatttgtatg accctggaag gccatgaaaa
                                                                     2700
tgcagagaaa ttaaattgta aggaaataat tgaaaatttg gcaaaaattc ttaagagaca
                                                                     2760
tccaggttta agaaacattt tgcctataac tactgccaaa gtgcctatag taaaatttga
                                                                     2820
acacaggcga agtgggttag aaggcgatat cagtttatat aatacgttgg ctcaacataa
                                                                     2880
cacaagaatg ctagctactt atgcagctat tgatcctaga gtgcagtatt tgggatatac
                                                                     2940
tatgaaagtg tttgctaagc gatgtgacat tggggatgct tccaggggga aqtttatctt
                                                                     3000
catatgcata tatccttatg ggtgctgtac tttctgcagc agaggaaagc cacctgttat
                                                                     3060
cccagttcta caagagatct ttggatggga aaacagattc cacagagaat qqttgatqqa
                                                                     3120
tggaatgctt tcttctttga taaaacagaa gaactgaaaa agcgtttacc ttcacttgga
                                                                     3180
aagaacacag aatcattagg ggagctttgg ctgggactgc ttcqtttcta tactqaaqaq
                                                                     3240
tttgatttca aggaatatgt aattagcatt cggcagaaaa agctgttgac aacttttgag
                                                                     3300
aagcagtgga cttccaagtg cattgcaatt gaagaccctt ttgacttgaa tcataacctt
                                                                     3360
ggtgctggag tttccagaaa aatgaccaat ttcatcatga aagcatttat caatggaagg
                                                                     3420
aaactttttg gtaccccttt ttatccactc attggcagag aagctgagta cttctttgat
                                                                     3480
tccagagtat taacagatgg agaactggct cccaatgata gatgttgccg tgtgtgtgga
                                                                     3540
aaaataggcc actacatgaa agactgccct aaaaggaaaa gcagtttact gtttagacta
                                                                     3600
aagaagaaag acagtgaaga agagaaggaa gggaatgaag aagagaaaga ttcccgagat
                                                                     3660
gttcttgacc cccgagacct ccacgatact cgagacttta gagacccgag agacctcaga
                                                                     3720
tgttttatat gtggagatgc tggacatgta cgaagggagt gcccagaggt caagctggcc
                                                                     3780
cgtcagagga atagcagtgt ggcagcagcc cagctggtcc gcaaccttgt aaatgctcaa
                                                                     3840
caggtggctg gttcagctca gcaacagggt gatcagtcca taaggactag acagtcatca
                                                                     3900
gaatgttctg aatcaccatc ttattctcct cagcctcagc catttccaca gaactcttcc
                                                                     3960
cagtcagctg ctattactca gccttcatct cagccaggat cccaacctaa gcttggccca
                                                                     4020
cctcagcagg gagcccaacc tccccatcag gtccagatgc cactgtataa ctttccccag
                                                                     4080
teaceaceag eteagtatte teccatgeae aatatgggat tgttgeeaat geaceetete
                                                                     4140
cagatecetg ecceptectg generatecat ggeneagtga tenactetge accaggnagt
                                                                     4200
gcccccagca atattggcct aaatgatccc agcatcatct ttgcacagcc tgctgccaga
                                                                     4260
cctgtggcaa tccctaacac gtctcacgat ggacactggc cccgtactgt ggctccaaat
                                                                     4320
tccctggtaa acagtggtgc agtggggaat tcagagccag gctttcgagg actgactcct
                                                                     4380
ccaatteett gggaacatge accgegteee cattteecee ttgteecage ttegtggeet
                                                                     4440
tatggtttgc atcaaaactt catgcatcag ggaaatgccc gattccagcc caacaaact
                                                                     4500
ttctatactc aagacagatg tgccacccgt cggtgtagag agcgttgtcc ccacccacca
                                                                     4560
agaggaaacg tgtcggagta atgcgagtcc attttctttc agctggtcta ccgatgcaca
                                                                     4620
gcaaccagcc aatcctgctg tctcaagggt atccgtacct caatgtcagt tacattcagc
                                                                     4680
agaaaaagtg acatttaatg gaaagcaaaa caaatcaggt cctgatttaa aattttaaca
                                                                     4740
cgtttagata gcttatttaa attctaagac tgtttttaca gactgtatta tttgtatata
                                                                     4800
aatatgaact atagttttta ctagtatcac caaattgagt gataccaaat ttcatctatt
                                                                     4860
ttattacccc taattttaag ggaattttat gttttgttta aacccctgat gaaatgtata
                                                                     4920
aagagagaaa tttaaaaaaa ttacattctt tattttccta ttagctgtat tccatacctt
                                                                     4980
tggttgcttc agactttata tatattgttc ttaagaatta ggaaagaatt tccatgtgtt
                                                                     5040
ttaaatttgt cacttcctat tctttacaga accttgtagt gccaaaaact ttttaaaagg
                                                                     5100
taaaaaaata aaataaaatt acaacatgaa gattcaaaaa atttttttct tttacatact
                                                                     5160
tgtatattga atatattcaa acttgaatgg aaagttgctt ttttgtctgt atttgaagta
                                                                     5220
cttctatttt aagttaataa atctttttga caaga
                                                                     5255
```

<210> 3374

<211> 2440

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (344)...(1917)
<223> similar to gi5052652 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3374
ggtgcaggca ggtgcgatgg gccagcttga ggcacactga ggggacgcgg ggctgggcag
                                                                      60
tggcgtgcgc tcgggccgcc gccgccgctg cctcggcggg tcctcgqcct cttcaqqcaa
                                                                     120
ccagccgcct caggagctgg ggcttgggga gctgctggag gagttctccc ggactcagta
                                                                     180
ccgggccaag gatggcagcg ggaccggcgg ctctaaggtt gagcgcattg agaagaqatg
                                                                     240
tctggagctg tttggccgat actactgttt cagcgtgatt ccaaacacga atggggatat
                                                                     300
ctgtggccac tatccccggc acatcgtgtt cctggagtat gagagttctg agaaggagaa
                                                                     360
agacacgttt gagagtaccg tacaggtgag caagttgcaa gacctcatcc accgcagcaa
                                                                     420
gatggcccgg tgcagaggac ggtttgtctg cccagtaatc ctgttcaagg gcaagcacat
                                                                     480
ttgcaggtcg gccacactgg ctggatgggg agagctgtat ggacgctcag gctacaacta
                                                                     540
ttttttctca gggggtgcag atgatgcctg ggcagatgtg gaggacgtca cggaggagga
                                                                     600
ctgtgctctt cgaagtggtg acacgcatct ttttgataag gtcagaggct atgacatcaa
                                                                     660
gctgcttcga tacctgtcag tcaaatacat ctgtgacctg atggtggaga acaagaaggt
                                                                     720
gaagttttggc atgaatgtaa cctcctctga gaaggtggac aaagcccagc qctatqccqa
                                                                     780
cttcactctc ctctccatcc cgtatccagg ctgtgaattt ttcaaggaat ataaagatcg
                                                                     840
ggattacatg gcagaagggc tcatatttaa ctggaagcag gactacqttq atqccccatt
                                                                     900
qaqcatcccc qacttcctga ctcactctct gaacattgac tggagccagt atcagtgttg
                                                                     960
ggatctggtg caacaaacac aaaactacct gaagctgctg ctttccttag ttaacagtga
                                                                    1020
tgatgacagc gggctgctgg tacactgtat ctcaggctgg gatcggaccc ccctcttcat
                                                                    1080
ctccctcctg cgcctttcct tgtgggctga tgggctcatc cacacgtccc tgaagcccac
                                                                    1140
tgagateete taeeteaetg tggeetatga etggtteete ttegggeaea tgttggtaga
                                                                    1200
tcggctcagc aaaggggagg agattttctt cttctgcttc aattttttga agcatattac
                                                                    1260
ctccgaggag ttctctgctc tgaagaccca gaggaggaag agtttgccag cccgggatgg
                                                                   1320
aggetteace etggaagaca tetgeatget gagacgaaag gacegtggea geaceaceag
                                                                   1380
ccttggcagc gacttctccc tggtcatgga gagttcccca ggagccactg ggagcttcac
                                                                   1440
ctatgaggcc gtggagctgg tcccagcagg agcgccaact caggcagctt ggaggaagag
                                                                   1500
ccactcatcc tctccacaga gtgtcctctg gaaccggcca caaccctcag aggaccgctt
                                                                   1560
gccttcccag caggggctgg cggaagccag gtcttccagc tcctcttcct caaaccattc
                                                                   1620
tgataacttt ttcaggatgg gtagcagtcc cctggaggtc cccaaaccca gatcagtgga
                                                                   1680
ccatecectg eceggateet etetetecae agactatgge agetggeaga tggtaacggg
                                                                   1740
ctgtggcagt attcaggagc gggctgtcct gcacacagac tcctctctc ctttcagctt
                                                                   1800
cccggatgag ctccctaaca gttgtctgct tgcagccctg agtgatcgag agactcggct
                                                                   1860
gcaggaggtg cgctcagcct tcttggctgc gtacagcagc acagtggggc ttcgggcagt
                                                                   1920
agcccccagt ccttccggtg ccatcggggg cctgctggag caatttgccc gtggtgttgg
                                                                   1980
actocggago atcagoagoa atgoottgtg aagaagooag cocatgacat tttootgoto
                                                                   2040
ctctctcagc tgagccctta gcagagaatc aaagccatgc ctggccgaag gggtacttcc
                                                                   2100
aggtcagggg aaatttcagt cccccatctc catcatgaac atggcagccc caaagctgag
                                                                   2160
caaggccaaa gacagggttt tccaaccccc agcctcttga ctggtgacca ccacccttc
                                                                   2220
ttgtcactgt ctcccaccca ccccatcttt gctgggattc ccatcaactc tcagaactgt
                                                                   2280
gtggggtttc cctggggcct tgtggaagcc atgacttcac aaagacccta cctgtcagtt
                                                                   2340
cttgtttctg gggaggaggg atcacctgca ctgagaatga ggcagtttga cacagatcac
                                                                   2400
2440
```

```
<211> 2529
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2531)...(681)
<223> similar to gi4884092 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3375 ttttttttt ttagtacaac aaagctctca accagtttta tttttcctca caatgaacgg 60 120 cccatttact ttggaaactg aggagaaaga actgctttcc ccactcgtgt ctgggcaaag 180 ggtgtgccca gatgttggca aaggaaccag acaaaatcaa cagccagcag ttttctgttc 240 caaacagtta gctcctctac agtccagagg gaagctattc ctgagttcat tcaaggtgac 300 agcagaagtg tttctctctt tctgcttggc ccaactgtgc ctgagggctg atggatccag 360 accttgtaaa cattcagcta ggtgtaacat aaccagaaag gctgaaggaa ggctcttggc 420 cttcccagct tgagaagtag gggcctcatg tgtatctggt ggcctgcaga gcccaaagca 480 gagagctatg atgaataaaa tatttttatt gcttttctaa aataactcct ttcatataca 540 aggattcctt cagttaggtc atctattatc ctaaatgctc tctggtcatg agcaggtgag 600 gttctattta gccaagataa gtggctgcct cagagtttct catagggaaa actgaaatct 660 gattattttc ttttcttcac atagtctcta ggttgagaac tccaagtagt aaqaggcaca 720 ggataaggat gggagagact gagcattttt gagagaatac tcctctgctg aatgccactt 780 tgaagggaaa gaagtcgaat ggccatttcc agtccatttt gggttggccc cttggaggct 840 gtggcttctg ggtaatgtcc acaaagttca caagagttgt caaagatact tctgtaactt 900 gctgagaatc ctgtatagac tggcactggt ataggaatcg aactcctgat acatgagctt 960 gcgggttgga caggagacct acatatgccc acaatacctg gatctccagg gaaactggta 1020 tgagacagca ggaagtacag tttatagctg aaatgctgca gtgcctgttg aggatcctgg 1080 1140 gccttccatg aagagtctga taaatctcct gctgcaagtg gctgcagtct gccttcttca 1200 acctgagett geatecagat attgeattea etceaaactg caetteatgt ettttaacag 1260 agcaacttcc attaccctgg ctctgtaaga gggtcattga gtaacttata tcatcagtca 1320 gagccaagag tggcttccca actatatagc caggattccc acttctagga ctggtgagag 1380 aagcagctgt gctctgttga aaagccctga agcgaaggat gaagtgttgc tgtaaggaag 1440 cgcctggctc aacagtcagg ttggtttgtc ccaaactgac agaaactttc tggattccaa 1500 aagtcccatt ggtctctatc tcataggtga cctqaqaaac tacattctga caagtgtttc 1560 cagccaacag aggagcatta gcctgtgagg taagtattac aggaacctgg aactccatat 1620 tctgtggatc agtcatgctt cttggaacct ttaagactgt gaagttatag taagaggcag 1680 cattgagggc tgaatccaag gtacagctac tagccaggtt cttgaaaaaa cgagtgcaag 1740 ttgtactttt actetetagg aaacetgeag gattgettte ageacagagt cececagete 1800 caactcctgc aggttgtctc agcaagctta ttacagacca cttggggaag taagtaagaa 1860 tggggtcccc agccctgtaa aaagatggtg gtgattgtgt ttggaatgtt gaagtgaatg 1920 attcgcctcc aaactctgca gccagggcct ggaagttggt tgcattgacc ttttgaagct 1980 tctggaaata gtttaagttt gagttgttca catggacaca aaactgcctg attccattag 2040 aatccatgaa aactcttgaa ggaaacgggg aattactcct gaagataaca gagttgtcta 2100 cacaaaccca gcttgaagac cttacgctgc ctggaaggca gaaggagaaa actgtcctcg 2160 gatggagaag atagcagtcc ctgtcgcagc agcaatttat atcgcaggct ccaggagtca 2220 agtcacagac acagatcggt aagactggga agaggtccac agtcctattc ccaggggccg 2280 agggagccac gagagtaggg accactgtag ggagtccagg cacggccggg cgagttgcag 2340 tegectetga aggggaetgg agggtteege cateegteee tegetgeage tecaaagaeg 2400 tgggcactgc ccctgatggg gaggaagagg gctgaggccg ccacgccatc ggggaacacc 2460 agaaagaaca cttgcaggag cgcgagctgt ggggtgcgca tgggggcattc agggcctccg 2520 ggtccccc 2529

```
<210> 3376
<211> 4333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4336)...(404)
<223> similar to gi4033735 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3376
aaaaatttac ttttccaatc ccccttaaaa ttgggccccc caaqqattct tttaaaaggc
                                                                       60
cccccctttt ttttttttt gtacacaaat gtttatttct caattaaaca ttccctttaa
                                                                      120
acacaaggaa tgagttctaa atcttcataa agatgaatta aaaatgaaat ccctccagta
                                                                      180
tagtgtatat aatcactgtg ttcttggtca ctactggcat ttactgttta acatcaaaaa
                                                                      240
caaagacagg ttatttaaaa atcatgctac tggatttcta gctcttcctc tatgaccagt
                                                                      300
tctacactga tctgcaatgt ttaaaagttt acatcaccaa atcaaagcaa gtttaaggtg
                                                                      360
tgaagtagct gtgcattaaa cacaaaataa acaataaaat tataagatat agtcaagttc
                                                                      420
ataacgaata taggtgttct tatcatcgtt gtagattctt gggtaatgtg ctatgagagc
                                                                      480
gtcctgggaa ccaatgtaga tggagttgta aattttccaa tatacatctc tgactttccg
                                                                      540
ggctgggtga aacagaccct gtaaacaata ttgcaacatt ctacatggtc caatagcaac
                                                                      600
teteaggeee tetagggete eeataaetge etgaattaea tgaggagatg teteaaaeae
                                                                      660
attgggccat acatagttca acaagtgatt cagcgaatct tcacaaccaa atccataaac
                                                                      720
cccaagtgac atgtgctgta ccactgcact agccgtctgt ctgtgtacaa ggtctctatc
                                                                      780
cattaaagca tcttcaagta acggtgttac ggcataaatg tagtcttttc ccatttcacc
                                                                      840
aatatattca aacaagaagg aaagcgattt taacactcca ttttqaacat tcagttcagg
                                                                      900
aactctgtat tcattcatta aggcagggag tactgtaaag ggtgaacatg tttctgcaac
                                                                      960
aatagctatt gctacagtgg tacaaactct gttctgcctt tcttgaactt tgaggttgtt
                                                                     1020
cagaagtgta gccaatacat catgagggcc aatggccttt gcaatataac caaatgtgtt
                                                                     1080
gactgtggct ctacgaatag cctttttgtg ggcttttaag agctctaaaa gctcaaagca
                                                                     1140
aatcctcatc cactctcttg cagatacata ttcagctccc ctgtcagcaa tacgaccaac
                                                                     1200
aagatcaata caattotott gtactttttc atgtotgttc tttaagatgg gggtgagtct
                                                                     1260
aggcagcaga tetttaattg gtggagteat ettatgeata eetatgacat ttacaatgge
                                                                     1320
cttcagtgct ccaagaatgc tgcccaatac ttcagggtac tcttcaccca aatactcata
                                                                     1380
caatacaaca cccaagtgtc ccatcaattt ttcctcttga caagtcttca tgacaacagc
                                                                     1440
agttcgagaa atcaagtcag ctgcctgttg cctaacttta gcagatttgt tatttaaacg
                                                                     1500
ccacaaaact gtaccacaga tctgaggcaa gtatggtttg actcgtttgc caagagcatt
                                                                     1560
aaccactgtg ccaaagccgt tcaacattac tgagtcctct gtagtctgtt cttggaaagc
                                                                     1620
ataaagaata ccatcaatca gttgttcttc aagtttatga tcaatatctg ctgctcccaa
                                                                     1680
attgcccata attttctcaa ttgtctccat caccattttt ctgtactgtt cggcttcatc
                                                                     1740
tttcagatca tccacaatcc tggatataat ttctgctgca cctactttgt ttgccaactc
                                                                     1800
cacagtagta tcaactaact gtcggtaatt tcttctatcc aaagccatcc tgtgctgcca
                                                                     1860
gaagtgttta aaaaagggag gaagaatctc tgttttaatg tagtttgctt ctacaccatc
                                                                     1920
tgtcccacaa cactgtttta ccaccttcag cacaattttt ttcatttcct catcaggaga
                                                                     1980
ctggaattct cgaataagga ttaacatcac ttctctagta tagtagttgg catattctqc
                                                                     2040
atccataaga ggaataagat acccaatagc cttcaagaaa gcagccaaac cctttcctct
                                                                     2100
gtgttggcgg ataccettce ataaaggett taacacagaa tcaaaagatt cgataccata
                                                                     2160
aggagttgct gcttcagcca aggcagcaat ggccaaagca ctgatggtcc gaactttctg
                                                                     2220
```

```
ctgctcatcc acaagaccat gttcaatgat ttcaactaaa cttctaagat gtggcaagat
                                                                     2280
ggcacagccc ataagaatag ctatctgttg tacaatctta ataccagtgt gtctcgcttg
                                                                     2340
ccaggacttc ttgcttttgc acacagcttt taagaagggc aataaagaag gaatgcccag
                                                                     2400
ggcagaggct acaacagcaa aagctctagc tgttgtgtta cggacatact catccatgtt
                                                                     2460
atctatatca ggtctcatgg tagagatcat agtagccaga ccagcagcct ttgccaaatt
                                                                     2520
agaaatgatc tctcggcctt ccactctagc atagtaatct tcatcaatca atagcggttc
                                                                     2580
aatgaccacg aggatcttat gcacatatgg acgaactaag tcatcaagtt tgtacagtat
                                                                     2640
cctatcaata actttcacaa gtaaatgacg ctcttgatgc tcaagtgtag gagacatcag
                                                                     2700
cagaggaaga atctgattaa acaaaggacc agctccaaat tcacgagctt tatcagtaat
                                                                     2760
ctgacgcaat gcagcctttc tcattggtgg tgttccattc ttaattttta aaagcaactt
                                                                     2820
cattattttt ctctcttttt gctcttctgg tactaagtgt tgattcatca acatcaacca
                                                                     2880
atagtttatc aaagtattga atatcatcag gttttaaaaa tggaagattt ccagatggct
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ggtcattaac acttttcata gttcgatctt cagtttgcat gtggaaacca gtcataccac
                                                                     3000
ccaaaggtgt tggagtagct gtcagctttc gagctggagt tcgaatagga acataaccag
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ctggaggagg aagtacctta tatccttctg ggaacatagc atctaattcc tcatcagaaa
                                                                     3120
gtgggcgatt tctctcatca atttctcttt cccaccgcca agcctgaagc tgttcaggag
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tcatactcat tatgtgacct ggagtagggg tagccatgtt catggctggt gtgccaattg
                                                                     3240
gtgtctttcc aggggtcaga actggagtgc ttccacccat ctgactagct ggtgtttcat
                                                                     3300
cccaccgtga ttttctttta ctggctccag gagtcggtgt ttcaccaata gaatctccac
                                                                     3360
ctcgatctgt tcgaggagtc tcagcccatc cacttccatg cccaggagta tctctcctct
                                                                     3420
qttttggggg tttcaatccc catctgtttt taacgaagca actggaagtt gcgcctccca
                                                                     3480
tggccctggt gtcggcatgg ccctggtgta tcacctcgtc ccaggagtag caagctcccc
                                                                     3540
gctggttgtg tggctaggtt gtaggatccc atatttttga gcctggggtt gctcccagga
                                                                     3600
gtctcgcttc cctttgcacg acctggtgtc tcatcccatc ttaaggaagg agtatgccca
                                                                     3660
ggggtctctg cctgatccca acttgatagt tttttgggag tggcaccagg agtctgatca
                                                                     3720
gctgtttgat cccaacgccg ttttcgtttt gatggaggct gggacgctgc tgctccattg
                                                                     3780
acgactttta gttctccagc tttagctttt tctgctagct gttgcctaat ttctcgttct
                                                                     3840
tctttagtca agtgttgttc tcgcattaca tccatgtaag tcctagcatt cattttagga
                                                                     3900
tcaggggttt tccctccatc tgcaaaagga tcaagacgct ctggggaaat tatcatggtc
                                                                     3960
cgcctatgct ttttgtattc atcttcccgg tctgcaatct ttggaggtct gtgctcagca
                                                                     4020
aatggatcat actgttctgt tgactgtggt atatcattaa gcaatgccac aggggcatga
                                                                     4080
tatcctggct tcttctgacc aagcaaactc gtagatgatg aatagtcatc gtcatcatct
                                                                     4140
tcaagttcag ttgcagcaat tgatgtcacg tatccagcaa atctgctgtc acttccacca
                                                                     4200
taaatttcct ggtcataata acctgtagaa tcgaggccca ctccttgagc ttcatcaaga
                                                                     4260
gctgccttct tgccttgaat ttctcgaatc tgtgcttcaa tatcttcgtg agtcttggcg
                                                                     4320
atcttcgcca ttt
                                                                     4333
```

```
<210> 3377
<211> 835
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(836)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (835)...(251)
<223> similar to gi3493462 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3377
ttttttttt ttaactggaa agtataccaa tttcacttta ttagcctaat ttaggaatag
                                                                       60
gatgaggaga gcggggttga ggtcaggcat gaaggaagag ggtaaaaact tgtgatggtt
                                                                      120
aagatccctt cagaactctg gtgcagtcct caatcactgc agctttactg tcagtcagtg
                                                                      180
gagctgcaat ccaaaagacg gaaaatcgac tcctgttttc catttctgtg tccagtgact
                                                                      240
cttcagttac agtgtgatga ggtctaccag gttgccttta ggaggagtca tgctgtcagg
                                                                      300
aaagaaattt actaaggtgt caaagagctg agttctttga gcataggtgt gatccacatc
                                                                      360
agaaaagccc agagctgtaa aatctgaacc agatttgaat agagctgatg ccaggagctg
                                                                      420
aaactctttt gtctcttctg ggtctgaatg atccacagtt atataaagat cattttgtaa
                                                                      480
atatttcaga gcactaaggg gatccacttg ggccttttct tcaaacctgt gttttcttat
                                                                      540
gaggtacttg caatgcctca gtaaataatc ttttgaaggt ctacacaact tcagtgacca
                                                                      600
gaagtcatct aatctcatct ttggagagca agattttcct ggattcccac caaataagta
                                                                      660
atgaaccttg tgtagctcat cgtatacaag ctgatgggca aaccttggac atggttcttc
                                                                      720
ttcctgaaga cttttagttg gattatcctt tgcagcttga tcantcttat agacacaaga
                                                                      780
cctgcaagac attgcaacta tncctcacaa tgtcataaat ccagaatgaa tttct
                                                                      835
     <210> 3378
     <211> 1700
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (6)...(843)
     <223> similar to gi3881528 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3378
ggcacgagga gctggcacag gctgcactgc gcaggcacaa gggcatgctg ggtaagcgat
                                                                       60
acattgaact cttccggagc actgcagccg aagtgcagca ggtcttgaac cgctatgcat
                                                                      120
ccggcccact ccttcctaca ctgactgccc cactgctgcc catccccttc ccactggcac
                                                                      180
ctgggactgg gagggactgt gtacgcctcc gaggcctgcc ctacacggcc accattgaag
                                                                      240
acatectgag etttetgggg gaggeageag etgaeatteg geeceaeggt gtaeaeatgg
                                                                      300
tgctcaacca gcagggccgg ccatcgggcg atgccttcat tcagatgaca tcagcagagc
                                                                      360
gagccctagc tgctgctcag cgttgccata agaaggtgat gaaggagcgc tacgtggagg
                                                                      420
tggtcccctg ttccacagag gagatgagcc gagtgctgat ggggggcacc ttgggccqca
                                                                      480
gtggcatgtc ccctccaccc tgcaagctgc cctgcctctc accacctacc tacaccacct
                                                                      540
tecaagecae eccaaegete atteceaegg agaeggeage tetataeece tetteageae
                                                                      600
tgctcccagc tgccagggtg cctgctgccc ccacccctgt tgcctactat ccagggccag
                                                                      660
ccactcaact ctacctgaac tacacagcct actacccaag tgttgtccca gtcaggagcc
                                                                      720
ttggtccgca tgcagggtgt cccatacacg gctggtatga aggatctgct cagcgtcttc
                                                                      780
caggcctacc agctacccgc tgatgactac accagtctga tgcctgttgg tgacccacct
                                                                      840
cgcactgtgt tacaagcccc caaggaatgg gtgtgtttgt aggagagaaa gccaggaggt
                                                                      900
aagagccagc tgatatcctc ggcgaacatg tctctcctga gtccagaaga ccagcaccct
                                                                      960
caacctggta gcttcttct ggcttgtcaa agctctcaga aggtacctag aggagcccaa
                                                                     1020
gccccagctc catcctccac ttattctgcc tgtttccccc aaagacaatg gctggaccct
                                                                     1080
```

1140

gcatgcaggg ctgggggtgg aatggggcta accagctcct gatggcctga qccaqgcatc

```
ttgactggca cctggagagc ccttaagtct gtcctggctg tggcccatgc cgacagatat
                                                                     1200
cgtggggctg acaggtccac ggcaggcttg ctttctttta taaaatggaa gctctggtac
                                                                     1260
cttcaatgta tgactcctgg gagaatcaag ggtccatctg agcctctgag taaagatccc
                                                                     1320
aatgttctac ctctccctgt ccctcttgta ggggataggg aggcagagag agccagcccc
                                                                     1380
taccctcaga gtatctggac ctcagagacc atgttgtgcc aggggtggtc ccacctaaag
                                                                     1440
atgctagccc ctctccaggt gggcataagg agtaacagat ggcaaaacca caaactattt
                                                                     1500
tgatggactg tgctgcagta tcaccagaag acattagggg gcagtaggcc cccacacaaa
                                                                     1560
accttcaggc ttgaatttta aaggggagga ctttctgcca acttttcttg tatgccttgg
                                                                     1620
gaaagccagt tgccctgaac ccagcagaca ccatggaatg tcctttgcac gcattaaatg
                                                                     1680
gtacagaact gaagcctcgg
                                                                     1700
```

```
<210> 3379
<211> 1549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(1294)
<223> similar to gi310102 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3379 aggacgagga tgtttctgga agaaaaaatc ccctcgattt ctgatttaaa gctagcaatt 60 cgaagagcta ctctgaaaag atcatttact cctgtatttt tgggaagcgc cttgaagaac 120 aaaggagttc agcctctttt agatgctgtt ttagaatacc tcccaaatcc atctgaagtc 180 cagaactatg ctattctcaa taaagaggat gactcaaaag agaaaaccaa aatcctaatg 240 aactccagta gagacaattc ccacccattt gtaggcctgg cttttaaact ggaggtaggt 300 cgatttggac aattaactta tgttcgcagt tatcagggag agctaaagaa gggtgacacc 360 atctataaca caaggacaag aaagaaagta cggttgcaac ggctggctcg catgcatgcc 420 gacatgatgg aggatgttga ggaagtatat gccggagaca tctgtgcatt gtttggcatt 480 gactgtgcta gtggagacac attcacagac aaagccaaca gcggcctttc tatggagtca 540 attcatgttc ctgatcctgt catttcaata gcaatgaagc cttctaacaa gaacgatctg 600 gaaaaatttt caaaaggtat tggcaggttt acaagagaag atcccacatt taaagtatac 660 tttgacactg agaacaaaga gacagttata tctggaatgg gagaattaca cctggaaatc 720 tatgctcaga ggctggaaag agagtatggc tgtccttgta tcacaggaaa gccaaaagtt 780 gcctttcgag agaccattac tgcccctgtc ccgtttgact ttacacataa aaaacaatca 840 ggtggtgcag gccagtatgg aaaagtaata ggtgtcctgg agcctctgga cccagaggga 900 ctacactaaa ttggaatttt cagatgaaac attcggatca aatatttcca aagcagtttg 960 tgcctgctgt agaaaagggg tttttagatg cctgcgagaa gggccctctt tctggtcaca 1020 agctctctgg gctccggttt gtcctgcaag atggagcaca ccacatggtt gattctaatg 1080 aaatctcttt catccgagca ggagaaggtg ctcttaaaca agccttggca aatgcaacat 1140 tatgtattct ttgaacctat tatggctgtg gaagttgtag ctccaaatga atttcagggg 1200 acaagtaatt ggcaggaatt aaccgacgcc atggggtaat cactgggcaa gatggagttg 1260 aggactattt tacactgtat gcagatgtaa gtagtcttgg tcattggcag tcctgctttt 1320 attaaccata gaaggaaatc caggttagct tttgtttttg caaatggaca catttccttg 1380 ctgaatttgt ggctttatac atgtggcatt ttctgtaatt tgctattaaa gcaactctta 1440 agtgcagaag ttaaaaataa gatttatttt atcttgacct tttgtgaatg tgtcattttc 1500 ttagatgtat attatctctc tttcttgaat aagcacagat ggacaaatt 1549

```
<210> 3380

<211> 2580

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (6)...(1976)

<223> similar to gi1556399 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

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<400> 3380
ggcacgaget gtgttccgac atctacctaa agttctatga acctcaagat agagatgatc
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tctattttta cattgccaca tacctagagc accatgtggc ggagcacact gctgagagct
                                                                      120
acatgctgca gtggcagcgt ggacaccttt ccaactatca gtacctcctt cacctcaaca
                                                                      180
acctggccga ccgcagctgc aacgacctct cccagtaccc tgtgtttcca tggataatac
                                                                      240
atgattattc cagctcagaa ctagatttgt caaatccagg aaccttccgg gatctcagta
                                                                      300
agccagtagg ggccctaaat aaggaacggc tggagagact actgacacgc taccaggaaa
                                                                      360
tgcctgaacc aaagttcatg tatgggagtc acctactctt ccccgggtta tgtacttttt
                                                                      420
tatcttgtta ggattgcacc cagagtatat gctgtgcctg cagaatggaa gatttgataa
                                                                      480
tgcagataga atgttcaaca gtattgcaga aacttggaaa aactgtctgg atggtgcaac
                                                                      540
ggattttaaa gagttaattc cagaattcta tggtgatgat gtgagctttc tagtcaatag
                                                                      600
cctgaagttg gatttgggaa agagacaagg aggacagatg gttgacgatg tggagcttcc
                                                                      660
cccttgggct tccagtcccg aggactttct ccagaagagc aaagatgcat tggaaagcaa
                                                                      720
ttatgtgtct gaacaccttc acgagtggat tgatctaata tttggctaca aacaaaagg
                                                                      780
gagtgatgca gttggggccc ataatgtatt tcatcccctg acctatgaag gaggtgtaga
                                                                      840
cttgaacagc atccaggatc ctgatgagaa ggtagccatg cttacqcaaa tcttggaatt
                                                                      900
tgggcagaca ccaaaacaac tatttgtgac accacatcct cgaaggatca ccccaaagtt
                                                                      960
taaaagtttg tcccagacct ccagttataa tgcttctatg gcagattccc caggtgaaga
                                                                     1020
gtcttttgaa gacctgaccg aagaaagcaa aacactggcc tggaataaca tcaccaaact
                                                                     1080
gcagttacac gagcactata aaatccacaa agaagcagtt actggaatca cggtctctcg
                                                                     1140
caatggatct tcagtattca caacatccca agattccacc ttgaagatgt tttctaaaga
                                                                     1200
atcaaaaatg ctacaaagaa gtatatcatt ttcaaatatg gctttatcgt cttgtttact
                                                                     1260
tttaccagga gatgccactg tcataacttc ttcatgggat aataatgtct atttttattc
                                                                     1320
catagcattt ggaagacgcc aggacacgtt aatgggacat gatgatgctg ttagtaagat
                                                                     1380
ctgttggcat gacaacaggc tatattctgc atcgtgggac tctacagtga aggtgtggtc
                                                                     1440
tggtgttcct gcagagatgc caggcaccaa aagacaccac tttgacttgc tggccgagct
                                                                     1500
ggaacatgat gtcagtgtag atacaatcag tttaaatgct gcaagcacac tgttagtttc
                                                                     1560
cggcaccaaa gaaggcacag tgaatatttg ggacctcaca acggccacct taatgcacca
                                                                     1620
gattccatgc cattcaggga ttgtatgtga cactgctttt agcccagata gtcgccatgt
                                                                     1680
cctcagcaca ggaacagatg gctgtcttaa tgtcattgat gtgcagacag gaatgctcat
                                                                     1740
ctcctccatg acatcagatg agccccagag gtgctttgtc tgggatggaa attccgtttt
                                                                     1800
atctggcagt cagtctggtg aactgctcgt ttgggacctc cttggagcaa aaatcagtga
                                                                     1860
gagaatacag ggccacacag gtgctgtgac atgtatatgg atgaatgaac agtgtagcag
                                                                     1920
tatcatcaca ggaggggaag acagacaaat tatattctgg aaattgcagt attaagtgcc
                                                                     1980
ttttcctctc ctgaatatta aattgaactc tatttaatgc atttttaaac caaactttta
                                                                     2040
aacggactgg tgaatgtgca atgttagtaa ttagaagttt taccacatgg aaaatttgtg
                                                                     2100
gttttaaact ttctaaatca tggtgacttc attgaaagcc attagttgct attctcttag
                                                                     2160
ggcagataaa atgcggctgt gttaggaaaa acatgttaca ctgtaaggca gatgatcgtc
                                                                     2220
cccgtatgat gattgtcaga agacaggact aagtagcaga gaatagctaa gagataaatt
                                                                     2280
```

```
<210> 3381
<211> 2825
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2407)
<223> similar to gi3822218 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3381 caagtggctg cgggacactg ctgccagacc tgcccccagg agcgcagcag ttcggagcgg 60 cageegageg geetgteett egagtateeg egggaeeegg ageategeag ttatagegae 120 cgcggggagc caggagctga ggagcgggcc cgtggtgacg gccacacgga cttcgtggcg 180 ctgctgacag ggccgaggtc gcaggcggtg gcacgagccc gagcctcgct gctgcgctct 240 agcctccgct tctctatctc ctacaggcgg ctggaccgcc ctaccaggat ccgcttctca 300 gaccccaatg gcagtgtcct gtttgagcac cctgcagccc ccacccaaga tggcctggtc 360 tgtggggtgt ggcgggcagt gcctcggttg tctctgcggc tccttagggc agaacagctg 420 catgtggcac ttgtgacact cactcaccct tcaggggagg tctgggggcc tctcatccqg 480 caccgggccc tggctgcaga gaccttcagt gccatcctga ctctagaagg cccccacag 540 cagggcgtag ggggcatcac cctgctcact ctcagtgaca cagaggactc cttgcatttt 600 ttgctgctct tccgagggct gctggaaccc aggagtgggg gactaaccca ggttcccttg 660 aggetecaga tietacacea ggggeageta etgegagaae tteaggeeaa tgteteagee 720 caggaaccag gctttgctga ggtgctgccc aacctgacag tccaggagat ggactggctg 780 gtgctggggg agctgcagat ggccctggag tgggcaggca ggccagggct gcgcatcagt 840 ggacacattg ctgccaggaa gagctggcga cgtcctgcaa agtgtccttt gtggggctga 900 tgccctgatc ccagtccaga cgggtgctgc cggctcagcc agcctcacgc tgctaggaaa 960 tggctccctg atctatcagg ccgtgggtat ctgccctggg ctgggtgccc gaggggctca 1020 tatgctgctg cagaatgagc tcttcctgaa tgtgggcacc aaggacttcc cagacggaga 1080 gcttcggggg cacgtggctg ccctgcccta ctgtgggcat agcgcccgcc atgacacgct 1140 gcccgtgccc ctagcaggag ccctggtgct acccctgtg aagagccaag cagcagggca 1200 cgcctggctt tccttggata cccactgtca cctgcactat gaagtgctgc tggctgggct 1260 tggtggctca gaacaaggca ctgtcactgc ccacctcctt gggcctcctg gaacgccagg 1320 gcctcggcgg ctgctgaagg gattctatgg ctcaaaggcc cagggtgtgg tgaaggacct 1380 ggagccggaa ctgctgcggc acctggcaaa aggcatggcc tccctgctga tcaccaccaa 1440 gggtagcccc agaggggagc tccgagggca ggtgcacata gccaaccaat gtgaggttgg 1500 cggactgcgc ctggaggcgg ccggggccga gggggtgcgg gcgctggggg ctccggatac 1560 agectetget gegeegeetg tggtgeetgg teteceggee etagegeeeg ccaaacetgg 1620 tggtcctggg cggccccgag accccaacac atgcttcttc gaggggcagc agcgcccca 1680 cggggctcgc tgggcgccca actacgaccc gctctgctca ctctgcacct gccagagacg 1740 aacggtgatc tgtgacccgg tggtgtgccc accgcccagc tgcccacacc cggtgcaggc 1800 tcccgaccag tgctgccctg tttgccctga gaaacaagat gtcagagact tgccagggct 1860 gccaaggagc cgggacccag gagagggctg ctattttgat ggtgaccgga gctggcgggc 1920

```
agcgggtacg cggtggcacc ccgttgtgcc cccctttggc ttaattaagt gtgctgtctg
                                                                     1980
cacctgcaag gggggcactg gagaggtgca ctgtgagaag gtgcagtgtc cccggctggc
                                                                     2040
ctgtgcccag cctgtgcgtg tcaaccccac cgactgctgc aaacagtgtc cagtggggtc
                                                                     2100
gggggcccac ccccagctgg gggaccccat gcaggctgat gggccccggg gctgccgttt
                                                                     2160
tgctgggcag tggttcccag agagtcagag ctggcacccc tcagtgcccc cttttggaga
                                                                     2220
gatgagctgt atcacctgca gatgtggggc aggggtgcct cactgtgagc gggatgactg
                                                                     2280
ttcactgcca ctgtcctgtg gctcggggaa ggagagtcga tgctgttccc gctgcacggc
                                                                     2340
ccaccggcgg ccagccccag agaccagaac tgatccagag ctggagaaag aagccgaagg
                                                                     2400
ctcttaggga gcagccagag ggccaagtga ccaagaggat ggggcctgag ctggggaagg
                                                                     2460
ggtggcatcg aggaccttct tgcattctcc tgtgggaagc ccagtgcctt tgctcctctg
                                                                     2520
tectgeetet acteceacce ceactacete tgggaaceae agetecacaa gggggagagg
                                                                     2580
cagctgggcc agaccgaggt cacagccact ccaagtcctg ccctgccacc ctcggcctct
                                                                     2640
gtcctggaag ccccacccct ttcctcctgt acataatgtc actggcttgt tgggattttt
                                                                     2700
aatttatett caeteageae caagggeece egacaeteea eteetgetge eeetgagetg
                                                                     2760
agcagagtca ttattggaga gttttgtatt tattaaaaca tttcttttc agtcaaaaaa
                                                                     2820
aaaaa
                                                                     2825
```

```
<210> 3382
     <211> 1504
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(1093)
     <223> similar to gi5262621 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3382
gcgggcgccc caaagcagtg cgggaacagc tactggcgct gtccgcctgc gccccgttca
                                                                       60
atgtgcgctt caagaaggat cacgggctgg tggggcgagt gttcgccttc gatgctactg
                                                                      120
cccgtcctcc aggatacgag ttcgagctga agctcttcac cgaatacccc tgtggttccg
                                                                      180
gcaatgtgta cgccggcgtc ctggcagtgg ctcgccagat gttccacgat gctctgcggg
                                                                      240
agccgggcaa ggcactggct tcttcgggct tcaagtacct cgaatatgaa cgccggcatg
                                                                      300
gatcaggaga atggcggcag ctgggcgagc tgcttaccga cggcgtccgc agcttccgcg
                                                                      360
agccagctcc cgcggaggcc ctgccccagc agtacccaga gccggcccct gcggctctct
                                                                      420
gtggcccacc cccgcgagcc ccatcccgga acctggcgcc cacgccgcgc cgtcgcaagg
                                                                      480
catcccccga gccggagggc gaggcggctg ggaagatgac caccgaggag cagcagcaac
                                                                      540
ggcactgggt ggcacccggc ggcccgtact ccgctgagac ccctggtgtg ccctcgccca
                                                                      600
ttgccgccct gaagaatgtg gccgaagccc tgggccactc acccaaggac cctggcggag
                                                                      660
gcggggggcc tgtgcgtgca gggggcgcca gccctgcagc ctcctccacg gcccagccgc
                                                                      720
caacccagca tegeettgtg geeegeaacg gegaageaga agteagteee acageggggg
                                                                      780
ccgaagctgt cagcggggt ggcagcggca ctggggcgac ccctggggcc ccctgtgct
                                                                      840
tgtaccctgt gcagggagcg gctagaagac acccacttcg tccaggtgcc ctccggtgcc
                                                                      900
cgaacacaag ttctgcttcc cctgctcccg gaagttcatc aaggcgcagg gcccggccgg
                                                                      960
ggaaggtgta ctgcccgagc ggagacaagt gcccgctggt cggctcctcc gtgccctggg
                                                                     1020
ccttcatgca gggcgagatc gccaccatcc ttgctggaga catcaaagtt aagaaagaac
                                                                     1080
gggaccccta ggctaccact gcctccaggc tactgccctc tgcccctttg ccacccaccg
                                                                     1140
ctgccgcgga taaattattc cctccccgac ccagcccagt gccacctcta tctgtgtaca
                                                                     1200
tactcccttc ttccacccag atgggtcccc tggggtagat gcattgtggg tggggggaga
                                                                     1260
```

```
aagcttgtgg ctcctgtccg agggggtgtt tggggtccct tggcccctcc agtttccctc 1320 tgtcctcctt ggcttggctt tgctgctgct tgtagttggg ggagaggtgc ccccctcctc 1380 cttgagaagg gacctcctga aaactcgctc tttataaacg aggcaaaagc atttaattcc 1440 caccccccca cccccgctc ccttctgctc cttcaataaa ccgaaagatg ggttttttt 1500 tttc
```

```
<210> 3383
<211> 1333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (47)...(1247)

<223> similar to gi5442271 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3383 gccaggccgg caccaggcac agacacttat gcccttgttg ggagaacaga gagaggctct 60 cttgtccact gcctgtcttc ggttccaact gctggttctc ctagaggcct ctcctcagac 120 togcagaget gcctgatcat tgctacagaa tgaactctag cccagctggg accccaagtc 180 cacagecete cagggecaat gggaacatea acetggggee tteagecaae ecaaatgeee 240 agcccacgga cttcgacttc ctcaaagtca tcggcaaagg gaactacggg aaggtcctac 300 tggccaagcg caagtctgat ggggcgttct atgcagtgaa ggtactacag aaaaagtcca 360 tcttaaagaa gaaagagcag agccacatca tggcagagcg cagtgtgctt ctgaagaacg 420 tgcggcaccc cttcctcgtg ggcctgcgct actccttcca gacacctgag aagctctact 480 tcqtqctcga ctatgtcaac ggqqqagagc tcttcttcca cctqcagcgg gagcgccqqt 540 tectggagee eegggeeagg ttetaegetg etgaggtgge eagegeeatt ggetaeetge 600 actocotoaa catoatttac agggatotga aaccagagaa cattotottg gactgooagg 660 gacacgtggt gctgacggat tttggcctct gcaaggaagg tgtagagcct gaagacacca 720 catccacatt ctgtggtacc cctgagtact tggcacctga agtgcttctg gaaagagcct 780 tatgategag cagtggaetg gtggtgettg ggggeagtee tetacgagat getecatgge 840 ctgccgccct tctacagcca agatgtatcc cagatgtatg agaacattct gcaccagccg 900 ctacagatee eeggaggeeg gacagtggee geetgtgaee teetgeaaag eetteteeae 960 aaggaccaga ggcagcggct gggctccaaa gcagactttc ttgagattaa gaaccatgta 1020 ttcttcagcc ccataaactg ggatgacctg taccacaaga ggctaactcc accettcaac 1080 ccaaatgtga caggacctgc tgacttgaag cattttgacc cagagttcac ccaggaagct 1140 gtgtccaagt ccattggctg tacccctgac actgtggcca gcagctctgg ggcctcaagt 1200 gcatteetgg gattttetta tgegecagag gatgatgaea tettggattg etagaagaga 1260 aggacctgtg aaactactga ggccagctgg tattagtaag gaattacctt cagctgctag 1320 gaagagctgt att 1333

<210> 3384

<211> 1067

<212> DNA

<213> Homo sapiens

```
<220>
     <221> misc_feature
     <222> (26)...(498)
     <223> similar to gi3135264 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3384
gttccgggag gcgcgtgggg cttgaggccg agaacggccc ttgctgccac caacatggag
                                                                       60
actttgtacc gtgtcccgtt cttagtgctc gaatqtccca acctgaagct gaagaagccg
                                                                      120
ccctggttqc acatgccgtc ggccatgact gtgtatgctc tggtggtggt gtcttacttc
                                                                      180
ctcatcaccg gaggaataat ttatgatgtt attgttgaac ctccaagtgt cggttctatg
                                                                      240
actgatgaac atgggcatca gaggccagta gctttcttgg cctacagagt aaatggacaa
                                                                      300
tatattatgg aaggacttgc atccagcttc ctatttacaa tgggaggttt aggtttcata
                                                                      360
atcctggacc gatcgaatgc accaaatatc ccaaaactca atagattcct tcttctgttc
                                                                      420
attggattcg tctgtgtcct attgagtttt ttcatggcta gagtattcat gagaatgaaa
                                                                      480
ctgccgggct atctgatggg ttagagtgcc tttgagaaga aatcagtgga tactggattt
                                                                      540
gctcctgtca atgaagtttt aaaggctgta ccaatcctct aatatgaaat gtggaaaaga
                                                                      600
atgaagagca gcagtaaaag aaatatctag tgaaaaaaca ggaagcgtat tgaagcttgg
                                                                      660
actagaattt cttcttggta ttaaagagac aagtttatca cagaattttt tttcctgctg
                                                                      720
gcctattgct ataccaatga tgttgagtgg cattttcttt ttagtttttc attaaaatat
                                                                      780
attccatatc tacaactata atatcaaata aagtgattat tttttacaac cctcttaaca
                                                                      840
ttttttggag atgacatttc tgattttcag aaattaacat aaaatccaga agcaagattc
                                                                      900
cgtaagctga gaactctgga cagttgatca gctttaccta tggtgctttg cctttaacta
                                                                      960
gagtgtgtga tggtagatta tttcagatat gtatgtaaaa ctgtttcctg aacaataaga
                                                                     1020
tgtatgaacg gagcagaaat aaatactttt tctaattaaa aaaaaaa
                                                                     1067
     <210> 3385
     <211> 1748
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1749)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (1326)...(0)
     <223> similar to gi4587129 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3385
gttagcaaaa tacccattta ttaagaaaaa gttggtgtcc tttgctacca aaagggaaga
                                                                       60
aaaggggant aaaacaaata cgtagttact agcaacaaaa taagacaaac taatcagaaa
                                                                      120
tgctgtttat tgacaagata gggtgtcaca aatacatcat ttatagggag agaggggaca
```

180

<210> 3386

```
tgaacaagte ecaaaatett atacettetg cacageaage ecageagggg atgteetete
                                                                      240
tagagatcgg tttatccaag ggtaccccat gagaagggca gctccttgan tgcagctgcc
                                                                      300
gggaagagca tcgcacaccg gttccgtctc ctggggtctt cccccaqqqt aatqqtaaaa
                                                                      360
gtctggccct ggaaagtaaa cgaacgtccc ttgatgcggt tcntttgcaa gtcaaacctt
                                                                      420
tggcaaaaaa tagttcttgg ccttcaattg aggtttctcg aatggcaagc ctcccagagc
                                                                      480
tttctgcttt tctttcgggc tgatccgtag ggaaggcttg cttgaaqcca cccqqqqaac
                                                                      540
tttggccact taaggaacat gggcacgacc tttgtcccag gatagccccg tcaacccaag
                                                                      600
atggggctcg atgggccatg ttggagaaga tttaaggcct tttcttqqqa ttcccaagaa
                                                                      660
tgaactgcgc aaaagccaag ttcagcactg tttcagaggc caagtactgt aaccggtaat
                                                                      720
tccctggagg qggcnccaat agttttagng cgccncaccg tngacctcga gggggggccc
                                                                      780
gtacccaatt cgccctgcag gagcatggca gcgcgatggt aggggaggaa qatcqccaqt
                                                                      840
acagttctgc cacggacagt aggacactga tcaccatttc tgtgttcttc agtttctgac
                                                                      900
aatgaaccaa caatttttgt aaaagcttat gtgcttctga catttqqttc tqaqattqta
                                                                      960
atacaaccgc tttcctataa accaccctct atgctattga ggagctgtga attccctgta
                                                                     1020
accaagtgaa tcaagccaaa atggatattt gccaatcatt tcaattgctc tgtcaaaact
                                                                     1080
gtattttttg atcacataag catccataac tgggcgtgct tgactattag gcggaaatcg
                                                                     1140
gttccttcaa agtgctttaa cacttcagaa gctgcaggca aaacagccct gctccgcgtg
                                                                     1200
taagctctgc gaggtggcag agtgcgacag caaaqqactc tgtgttgttc tgctgcacgc
                                                                     1260
cccgcattcc accgcctccc aggctgtttc atgctcagca acatctgggc ctgttgcagt
                                                                     1320
gccatggtgc tgcgggccat acagcctcca gatggccgtt tttctgtgcg atgctgatat
                                                                     1380
egatgagete tgacaggetg tgtttccagt geaggaggte ggagteettt agggeateca
                                                                     1440
tcagcttgtt tgccgtcttc ccagcaaaag ctctcggtaa cccaaaatgt actgccttct
                                                                     1500
tcacagaatg ctccagcaga acatagctat cggatctctt ctgccccagc acataaagcc
                                                                     1560
agctcaaaca gtgctggaga cacacgtgat cgttggactc ctgggcaatc ctaattgcct
                                                                    1620
cctgcagggc gagctctgcc tgttgatagt gaccgaagcg gcagtgcagg gcggcaagat
                                                                     1680
tcagagcggc gtatctcaag ctccggccat agccctcttc cccattactt ttgcttcgga
                                                                     1740
cgcgtggg
                                                                     1748
```

```
<211> 3032
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(642)
<223> similar to gi5410355 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3386
ggcacgagga ttcgaggagt agtgctattt tttattggag tatttcttgc attagtgtta
                                                                       60
aatttacttc agattcagag aaatgtgacg ctctttccac ctgatgtgat tgcaagcatc
                                                                      120
ttttcttctg catggtgggt acccccatgc tgtggcacgg cttctgctgt gattgggtta
                                                                      180
ttatacccct gcattgacag acatctagga gaaccacata aatttaaaag agagtggtcc
                                                                      240
agtgtaatgc ggtgtgtagc agtctttgtt ggtataaatc atgccagtgc taaagtggat
                                                                      300
ttcgataaca acatacagtt gtctctcaca ctggctgcac tatccattgg actgtggtgg
                                                                      360
acttttgata gatctagaag tggttttggc cttggagtag gaattgcctt cttggcaact
                                                                      420
gtggtcactc aactgctagt atataatggt gtttaccaat atacatctcc agatttcctc
                                                                      480
tatqttcgtt cttggttacc atgtatattt tttgctggag gcataacaat gggaaacatt
                                                                      540
ggtcggacaa ctggcaatgt acgaatgtaa agttatcgca qaaaaaatcc catcaggaat
                                                                      600
```

```
gaagaaggca aaaaatatct tttgtacaga aaagcaagat gaaaaggatg tgaaatggta
                                                                   660
gatataccaa caaaacttca gactgtaaaa ttgccaggat gcagttttcc ccttgattgg
                                                                   720
ccgtgtgtgt atatatggaa taaatatata tatacacaca cacatattac tgcaatcctg
                                                                   780
tgattgcttc atctgtaaat cagttgtaaa cctttacata tttgacttaa ataactgtaa
                                                                   840
900
ttaaaacatg ccatacattg tatcacaatg ttaatgtgcc aagatattgt tcctgtcatg
                                                                   960
1020
caaaaacaaa caaacaaaaa gcatatgggg agctggtatt ttctctttag cttactgttg
                                                                  1080
tgccttttta tttttctaat cacagcagta tgagttatga gtgccctaat ttgtggttag
                                                                  1140
tttctaattt aatgttgttt catagagttt ggagtgtttt gatacagggt gaaaatgaac
                                                                  1200
ttctggtttc aaacctgcgt tactggagac agcccaaaga gtaattttct qttttgacag
                                                                 1260
gttttactgg aagtatatgt gatgagcaga agaggttatc agcattaaat tgttttggtt
                                                                  1320
ctaaatttgg aacagtatat ataattaaaa gtaaggaaca ttagaggatt taattagaat
                                                                 1380
aaatacatgt tttggaaata cagtgacctc ttgcagtgtc acaaaagtgc aaagtgatat
                                                                 1440
tagctgtcat ctgcaataca gaatctcatt gcttttgcac atggagcata taggaaactc
                                                                 1500
caaacagatc acaatgaggg tttctaaatc tgttggggtt ctgtcttctt attggggttc
                                                                  1560
tgtgaaggca aaccactgta ggctttagct ggggttcagt catatggact tcgttgggtg
                                                                 1620
gggatggcct agggtttttc atcttacatg cagtcttggg gggtgggatg aatacataat
                                                                 1680
ttcttatgta ttcgtgtatc cattagtgaa tagttcaagt ctgtttaaga gtgtattgag
                                                                 1740
atggcattct ctgcatgtta aagatcttaa tggcaaccag cacctcttaa gtatggttta
                                                                 1800
aacatattct tagctaattt tttccattag tttttgaaat tggtggcagt tgtctgatcc
                                                                 1860
acaagggcaa gatcttctga gtactctggg gtgtgagtat gtgtgcacac gtgtgtgttg
                                                                 1920
gagtgagtga gagaatgtgt ctgtgcatgt ggccatgctt tcctagaatg tcaagtagat
                                                                 1980
atttttacac tttgagtttt aaagcaatta ctatcagact gagatcttgt atgccaaact
                                                                 2040
ttaatctgct tttatgtttt caggctgaag gtgtgaaaat cctaagagga tttcatattg
                                                                 2100
aatatgtgta cacaatctta actatcgtgg tggaaaacat actactataa tttattatta
                                                                 2160
tatcttccag ataatgttat tcatttagaa caaataaggt atatttttta gaatcaactt
                                                                 2220
tgtaagcact ataaaatctt taataagtta taaggtctat gatgtgttta ctttaaaaat
                                                                 2280
tgctgttaaa agcaacacgt attaaatatg taattatcat ctgggttaag agtctgtttt
                                                                 2340
tcttctttgt ggtaagtctt agaatatggt actgtggatt aatctaatga aattaacata
                                                                 2400
tgtggttgaa gttaccaaga aacgatgaaa agaaactaaa tatagttgac ccttgaacaa
                                                                 2460
caggagttag gggcaccact ccccaacata gttgaaaatc catgtataac ttttgactcc
                                                                 2520
tccaaaactt aactactaat agcctactct tgatqggaag ccttaccaat aagaaacagt
                                                                 2580
tgatgaacac atattgtgta tggtatatgt attatatact gttttcttac aatagtgtaa
                                                                 2640
gctaaggaaa agaaaatgtg tttactcttc attcagtgga agtggaccat cctaaaagtc
                                                                 2700
ttcactcatg ctatcttcat gctgagtagt aggctgagga ggaggaggag ggttggtctt
                                                                 2760
gctgttgcgg gggtggaaga agatgtgcat tattagtggg cccacacagc tgaaaaccat
                                                                 2820
gctgttcaag ggtcaactgt gtgtggtatc ggtgagactg aatgattatc gttggtgttc
                                                                 2880
ttaaattatt ttcaggtcct ctagaaaata tgataattat agcaaaaaat atgattgttt
                                                                 2940
tgaaattttg ataaatatat aaatgtatag aacctattgt tttcaatgat agaaaatggg
                                                                 3000
aaacattttt taacattgct agattggcag tg
                                                                 3032
```

```
<210> 3387
<211> 1217
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1210)...(0)

<223> similar to gi4886481 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3387
ttttttttt ttctaaatga agtgctttta attttcagac caaacatttt taatataaaa
                                                                       60
acattttgat aatatacaaa cagcaatcac aacagcatcc acatggcagc aaggggacca
                                                                      120
gggcacagag agggggagcg ggctggggag ggacagtttt cagggtccca gttgcttccc
                                                                      180
tggcttgaaa tcaccctggt cctagcagag gacaggttaa ggctgccaga ggcagagggt
                                                                      240
ccctgaccct ggcccggaga cagactgccc aggcaggccc tctgatacca tcttccaacc
                                                                      300
atggcagcct ccaggaaaag ccagatccat ttaggagata acaggaaggt ggctgtgatt
                                                                      360
gacaggaaag gcaacatggt teeteageat eetgetgate acacetetgg gaggggetge
                                                                      420
tggattgaag aggacctaag aatcttcctg ggagcaggac agaaatggga tctaagtcta
                                                                      480
cctactaact aacattcccg cctgtgacac cagaaagctg gagtgggtct gctcagatgt
                                                                      540
acaggaaqaq aaaggaatga caaagccttt ggctcagcag gactggagcc ttgacaggca
                                                                      600
ctgaccaaga aagcctctag gtgggccagg gaggtctgtg ggaaagcttt ggatcaatgg
                                                                      660
tactcaaggg tgcacagtgg cacagtggcc ttagttagaa tttatgaaga cgaaaagaac
                                                                      720
acaagtcaga atttagaact gaagtacctg cttcttatag gcctgtagag gaaaagcgag
                                                                      780
atcateette tggeeaggae taggggagae ceaaggeetg ttettteeta ggggetgagt
                                                                      840
ttgacagacc tggattgcag ctgatggctc cmacagtcct ctagatgggc cctgcaggac
                                                                      900
tcgctgggag gcctggttgc ccctccccgg cgtgctggga cactctgggt tcctgcagtt
                                                                      960
agatgcagtc catggagttc tcagggagga ggccagggat gcagccaggg agccccaagc
                                                                     1020
ccttgatagg agtgcagttg agtgggaggc cgcagcccag ggaggggtcc tgggtctcta
                                                                     1080
tggcctccag cctgtccatg ttgttgtccc agttgatatg gaagcgggtc acccgggggt
                                                                     1140
tcgaggccaa gatgttccgc tggagctggg agaaatctgg cttcatgggc gggttctcac
                                                                     1200
gcagctcagc tcgtgcc
                                                                     1217
     <210> 3388
     <211> 1273
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1273)...(430)
     <223> similar to gil397235 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3388
ttttttttc atagttcata gtttattaca aatgcatatt atccaactca gtagaaatcc
                                                                       60
atgtacccca gaatgtacag aaggtatgca atgttccaga gtgtcattgt cagctctggt
                                                                      120
tttatatata tattaaatat atacatattt tgagacaggg tctcgctgtc acccaggctg
                                                                      180
gagtgcagtg gcacaatctc agctcactgc aacctctgcc tcccagcctc aagagatcct
                                                                      240
eccaceteat cettetgagt agetgggaet acatgegeat gecaceaeae ceagetatta
                                                                      300
tttttatttc tttttgtaga gacaagggct cactatgttt ctcaggctgg tcttgaactc
                                                                      360
ctggtctcaa gtgatccttc tgccttggcc tcccaaagtg ctggaattat aggcatgagc
                                                                      420
cactgagcct ggcctgatta tctgtttttt gaatagtgac cctaatgtgc ttttccagtt
                                                                      480
ccagtaactt ttgataaaat ttttcagcag tgtcttcatc taggtccatc ttctgggtca
                                                                      540
taatataatt tottocaaag coagtggtgg cactoagata titgatoaga ggattgagag
                                                                      600
attcaggctt ttggtggaaa agccatacca gagcttctgt tccattatat ggtgtcaaag
                                                                      660
```

720

tgaatgcatt tgcaaaaaag cgaagtagca atattgccgg catcaacagc gtccatataa

<210> 3389 <211> 346

<210> 3390

```
acggaggcag aattccatat gtcaaattgg tcaatgctgt acctggacag gccacattgg
                                                               780
aatagagacc ctgctggttg aagttcctgt tcaaaqccac actcaaaaqq tcagtqqcat
                                                               840
900
tagatttcct tgcattgcga gatgatgtcc agatgagctg agatggattg tcactgtgac
                                                               960
agaggagagg ctccagttcc cgaatcagga taaaatggcc aaagacattg gtctcaaaca
                                                              1020
cctcctgaag tccatcagca gtgatcttat caccctggqt cagcaggcct tcagcttgaa
                                                              1080
aagaggccaa agaaaagtgc tttgatattt agttgtggat taggcatgat cccagcattt
                                                              1140
agatatatac agtctaatct ctgaaacctt tgcttaagtt ccttggaggc ccggaagacc
                                                              1200
gactgcaggt tgctgacatc cacctggaca atggtgacct cagcagtggg gtgagaggcc
                                                              1260
agcagagcag cac
                                                              1273
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (348)...(130)
     <223> similar to gi1333929 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3389
ggcacgaggc tcctcacctt gggctggacg gggttggcac taacggggaa ctttccccag
                                                                       60
aacatggcca agctccagga tgggggtgat gagggaagga aggccagtga ggagaggagt
                                                                      120
gaggaagagg acagctgcga gtcaggtggt gagagcactt ggaggggctg agaggacatg
                                                                      180
ggctgggagt gaatgcatgt gcacatacac acacacact ctccagcata tgtacacatg
                                                                      240
cacacacaca cctctccagc atatgtacac atgcacacac acctctccag catatgtaca
                                                                      300
catgcacaca cacacctctc cagcatatgt acacatgcac acacac
                                                                      346
```

```
<211> 1118
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4)...(1121)
<223> similar to gi3041847 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3390
ggcacgagga caagttccgc ggactggagc tcagcagaca atgtactaga tggtgcctcg 60

```
ctcgtgccca agggttcatc caaagtcaag aggcgagtcc gcattcccaa caagcccaac
                                                                      120
tacageetta acetetggag cateatgaag aactgeateg geegggaget eteeaggate
                                                                      180
cccatgccgg tgaacttcaa tgagcccctg tccatgctcc agcggctgac agaggacctg
                                                                      240
gagtaccacc acctgctgga caaggcagtg cactgcacca gctcagtgga gcagatgtgc
                                                                      300
ctggtggccg ccttctctgt gtcctcctac tccaccacag tgcaccgcat cgccaagccc
                                                                      360
ttcaacccca tgctggggga gaccttcgag ctggaccgcc tcgacgacat gggcctgcgc
                                                                      420
tecetetgtg ageaggtgag ecaceaece eceteagetg egeactaegt gttetecaag
                                                                      480
catggctgga gcctctggca ggagatcacc atctccagca agttccgggg aaaatacatc
                                                                      540
tccatcatgc cgctaggtgc catccactta gaattccagg ccagtgggaa tcactacgtg
                                                                      600
tggaggaaga gcacctcaac tgttcacaac atcatcgtgg gcaagctctg ggatcgacca
                                                                      660
gtcaggggac atcgagattg tgaaccataa gaccaatgac cggtgccagc tgaagttcct
                                                                      720
gccctacagc tacttctcca aagagggcag cccggaaggt gacaggggtg gtgagtgaca
                                                                      780
gccagggcaa ggcccattac gtgctgtccg gctcgtggga tgaacaaatg gagtgctcca
                                                                      840
aggtcatgca tagcagtccc agcagcccca gctctgacgg gaagcagaag acagtgtacc
                                                                      900
agaccctgtc agccaagctg ctgtggaaga agtacccgct gccggagaac gcggagaaca
                                                                      960
tgtactactt ctcagagctg gccctgaccc tcaacgagca cgaggagggc gtagcgccaa
                                                                     1020
ccgacageeg cetgeggeee gaccagegge tgatggagaa gggeegttgg gacqaggeea
                                                                     1080
ataccgagaa gcagcggctg gaggagaagc agcgcctg
                                                                     1118
```

```
<210> 3391
<211> 1769
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(616)
<223> similar to gi4894362 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3391 aagcagagat cagcacttaa taggcattgc atggtccaca caggagagaa accgtacaga 60 tgtgagcagt gtggaaaagg ctttattggt aggctagatt tttataagca tcaggtggtc 120 cacacaggag agaaaccata taattgtaaa gaatgtggga agagcttcag atggtcctca 180 tgccttttga accatcagcg agtccacagt ggagaaaaaa gcttcaaatg tgaagaatgt 240 gggaagggat tttatacaaa ttcacaactg tcttcccatc agagatccca cagtggtgaa 300 aagccatata aatgtgagga gtgtgggaag ggctatgtta ctaagtttaa tcttgacttg 360 caccagaggg tccacacggg agagagctt tataattgta aggaatgtgg ggaagaactt 420 tatccgggcc tcaagtattt tgaatcataa gagactccac tgccagaaaa aaccattcaa 480 atgtgaggac tgtggaaaga ggcttgtaca caggacatac cgtaaagacc agccgagaga 540 ctatagtggg gaaaacccat ccaaatgtga ggattgtggg agacgctaca agaggcgctt 600 gaatctggat atacttttat cattatttct aaatgacaca taattgttca tatttatggg 660 gtacaacgtg ctattttaat gtgtgcatac aatttatagt gatccaatca gtgtaattgg 720 tgtatctgtt acctcaaaca tttaccattt ctttgtgttg gaaaattcaa aatccatttg 780 agaggagttg gtagacagca agggaagggt ccctggagac ccccagccaa aggggtcagt 840 gtctcatccc cacataacac aaaaagcagc ctggggaaga caatcaagct acaggcactg 900 ataagggaac tagcacaggg gattgtgcct ggagacatgc ccatgcctgc acagatagaa 960 gaacctccag cccattcagg taaaaactcg cacaaacctc cggctcactc agttaaggga 1020 acaagaccag acacagaaat gcctttgtcc tttgtataat cagcaggctc cgaggaaaaa 1080 gtttettett ttgtgggcat gaacacagtg ggetteagta ggtteaggtt ggeaetttet 1140

<210> 3392

```
tttgtggaaa aggaaaagcc cagcctctgt aaatcatcac ttcaactcct gattggtccc
                                                                    1200
gggccaaget gaatageest tatgaateat caetteggtt eetgattggt eeegggecaa
                                                                    1260
ggtcccagac caagctgaat cacgctttct ccaagacagc ccgcaggcta agtgcattcc
                                                                    1320
ttccccttcc cagtccataa aaaccccgga ccccagcctc aatactgggc aacttatttg
                                                                    1380
gatccccatc tccactgtgg agagcttttt tctttcactt attaaacttt tactccaatt
                                                                    1440
tcacccttgt gtctgtgctt cttaatcata ttggacgtga gattaagaac tccgggggat
                                                                    1500
acatcacaag agagactgtt acagtgtggt gcatttgtga gactacaaca catttttagc
                                                                    1560
aatttgtaaa taattgttga tgatagtcac ctttagtgct gcagaacagt agaacttatt
                                                                    1620
cttcccctct acctcttttg tatctgttgg ccaacctttg gccatctcac ctacctccta
                                                                    1680
cacttccctg cctgtctaca tccacgtgtt ctactctcta ctacaaaatc aactttttt
                                                                    1740
aacttgccct cgtgccaaga ttggcgtaa
                                                                    1769
```

```
<211> 2773
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(2774)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (66)...(2332)
     <223> similar to gi3880563 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3392
gcggccgcaa gaaggccaca ggcagccccg tgtccatctt cgtctatgat gtgaagcctg
                                                                       60
gcgcggaaga gcagacccag gtggccaaag ctgccttcaa qcgcttcaaa actctacggc
                                                                      120
accccaacat cctggcttac atcgatggac tggagacaga aaaatgcctc cacgtcgtga
                                                                      180
cagaggctgt gaccccgttg ggaatatacc tcaaggcgag agtggaggct ggtggcctga
                                                                      240
aggagctgga gatctcctgg gggctacacc agatcgtgaa agccctcagc ttcctggtca
                                                                      300
acgactgcag cctcatccac aacaatgtct gcatggccgc cgtgttcgtg gaccgagctg
                                                                      360
gcgagtggaa gcttgggggc ctggactaca tgtattcggc ccagggcaac ggtgggggac
                                                                      420
ctccccgcaa ggggatcccc gagcttgagc agtatgaccc cccggagttg gctgacagca
                                                                      480
gtggcagagt ggtcagagag aagcggtcag cagacatgtg gcgcttgggc tgcctcattt
                                                                      540
gggaagtett caatgggeee ctaeeteggg cageageet aegeaaceet gggaagatee
                                                                      600
ccaaaacgct ggtgccccat tactgtgagc tggtgggagc aaaccccaag gtgcgtccca
                                                                      660
acccageceg ettectgeag aactgeeggg cacetggtgg etteatgage aaccgetttg
                                                                      720
tagaaaccaa cctcttcctg gaggagattc agatcaaaga gccagccgag aagcaaaaat
                                                                      780
tettecagga getgageaag ageetggaeg catteeetga ggatttetgt eggeaeaagg
                                                                      840
tgctgcccca gctgctgacc gccttcgagt tcggcaatgc tggggccgtt gtcctcacgc
                                                                      900
ccctcttcaa ggtgggcaag ttcctgagcg ctgaggagta tcagcagaag atcatccctg
                                                                      960
tggtggtcaa gatgttctca tccactgacc gggccatgcg catccgcctc ctgcagcaga
                                                                    1020
tggagcagtt catccagtac cttgacgagc caacagtcaa cacccagatc ttcccccacg
                                                                     1080
tcgtacatgg cttcctggac accaaccetg ccatccggga gcagacggtc aagtccatgc
                                                                     1140
tgctcctggc cccaaagctg aacgaggcca acctcaatgt ggagctgatg aagcactttg
                                                                     1200
cacggctaca ggccaaggat gaacagggcc ccatccgctg caacaccaca gtctgcctgg
                                                                    1260
```

```
gcaaaatcgg ctcctacctc agtgctagca ccagacacag ggtccttacc tctgccttca
                                                                     1320
gccgagccac tagggacccg tttgcaccgt cccgggttgc gggtgtcctg ggctttgctg
                                                                     1380
ccacccacaa cctctactca atgaacgact gtgcccagaa gatcctgcct gtgctctgcg
                                                                     1440
gtotoactgt agatootgag aaatoogtgo gagaccaggo ottoaaggoo attoggagot
                                                                     1500
tectgtecaa attggagtet gtgteggagg accegaeeca getggaggaa gtggagaagg
                                                                     1560
atgtccatgc agcctccagc cctggcatgg gaggagccgc agctagctgg gcaggctggg
                                                                     1620
ccgtgaccgg ggtctcctca ctcacctcca agctgatccg ttcgcaccca accactgccc
                                                                     1680
caacagaaac caacattccc caaagaccca cgcctgaagg agttcctgcc ccagcccca
                                                                     1740
cccctgttcc tgccacccct acaacctcag gccactggga gacgcaggag gaggacaagg
                                                                     1800
acacagcaga ggacagcagc actgctgaca gatgggacga cgaagactgg ggcagcctgg
                                                                     1860
agcaggaggc cgagtctgtg ctggcccagc aggacgactg gagcaccggg ggccaagtga
                                                                     1920
gccgtgctag tcaggtcagc aactccgacc acaaatcctc caaatcccca gagtccgact
                                                                     1980
ggagcagctg ggaagctgag ggctcctggg aacagggctg gcaggagcca agctcccagg
                                                                     2040
agccacctcc tgacggtaca cggctggcca gcgagtataa ctggggtggc ccagagtcca
                                                                     2100
gegacaaggg egaceeette getaceetgt etgeaegtee eageaceeag eegaggeeag
                                                                     2160
actcttgggg tgaggacaac tgggagggcc tcgagactga cagtcgacag gtcaaggctg
                                                                     2220
agctggcccg gaagaagcgc gaggagcggc ggcgggagat ggaggccaaa cqcqccqaqa
                                                                     2280
ggaaggtggc caagggcccc atgaagctgg gagcccggaa gctggactga accgtggcgg
                                                                     2340
tggcccttcc cggctgcgga gagcccgccc cacagatgta tttattgtac aaaccatgtg
                                                                     2400
agcccggccg gcccagccag gccatctcac gtgtacataa tcagagccac aataaattct
                                                                     2460
atttcacacc cettgtgceg ggeteagtet ageceetggg aggeggetgg ggtetggege
                                                                     2520
cgccctgcgc agcccgcgcc cacgtcagac gtgaacatca atttgcttcg aaagccaagg
                                                                     2580
gtaaagaggc acgatctgat ttatcagttt ctagggaaac accctttggg agggaaggca
                                                                     2640
ggcagcgccc gccggnagga cctttacaac cggcccgcta acctggggag gggggccggt
                                                                     2700
agggcgcctc gggtctcaag gcgcctggga gggtctagcg gccctgaagg tcccttggtc
                                                                     2760
cgagccacag tcg
                                                                     2773
    <210> 3393
    <211> 2108
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (459)...(1694)
    <223> similar to gi3043548 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3393
tttcgtcggt tgcactcttc ctatagccca gagggcgaga gggcctgtgg cctgggggaa
                                                                       60
```

```
ggaggacgag gttctgcctg gatcccagca gtaggacgct gtgccatttg ggaacaaagg
                                                                      120
aatagtetge etggaateee tgeagatett ggggeeggag geeagteeaa eeettggage
                                                                      180
aggaagaaac gcaaagttgt caagaaccaa gtcgagctgc ctcagagccg gcccgcagta
                                                                      240
gctgcagact ccgcccgcga cgtgtgcgcg cttctctggg ccagagcgag cctgtttgt
                                                                      300
gctcgggtta agagatttgt cccagctata ccatgggccg cactcgggaa gctggctgcg
                                                                      360
tggccgctgg tgtggttatc ggggctggtg cctgctactg tgtatacaga ctggcttggg
                                                                      420
gaagagacga gaacgagaaa atctgggacg aagacgagga gtctacggac acctcagaga
                                                                      480
ttggggttga gactgtgaaa ggagctaaaa ctaacgctgg ggcagggtct ggggccaaac
                                                                      540
ttcagggtga ttcagaggtc aagcctgagg tgagtttggg actcgaggat tgtccgggtg
                                                                      600
taaaagagaa ggcccattca ggatcccaca gcggaggtgg tctagaggcc aaggccaagg
                                                                      660
```

```
cccttttcaa cacgctgaag gaacaggcaa gtgcaaaggc aggcaaaggg gctagggtgg
                                                                      720
gtaccatctc tgggaacagg acccttgcac cgagtttacc ctgcccagga ggcaggggtg
                                                                      780
gaggctgcca ccccaccagg agtggatcta gggccggggg cagggcaagt ggaaaatcca
                                                                      840
agggaaaggc ccgaagtaag agcaccaggg ctccagctac aacatggcct gtccggagag
                                                                      900
gcaagttcaa ctttccttat aaaattgatg atattctgag tgctcccgac ctccaaaagg
                                                                      960
tcctcaacat cctggagcga acaaatgatc cttttattca agaagtagcc ttggtcactc
                                                                     1020
tqqqtaacaa tgcagcatat tcatttaacc agaatgccat acgtgaattg ggtggtgtcc
                                                                     1080
caattattgc aaaactgata aaaacaaaag accccataat tagggaaaag acttacaatg
                                                                     1140
cccttaataa cttgagtgtg aacgcagaaa atcagggcaa gattaagacg tacatcagtc
                                                                     1200
aagtgtgtga tgacaccatg gtctgtcgct tggactcagc tgtgcagatg gctgggctaa
                                                                     1260
gactgttaac caacatgact gtgactaatc attaccaaca tttgctttcc tattcttttc
                                                                     1320
cagacttttt tgctttgtta ttcctgggaa atcacttcac caagatacag attatgaaac
                                                                     1380
taattataaa ctttactgaa aatccagcca tgacaagaga gctggtcagt tgtaaagtac
                                                                     1440
catcagaatt gatttccctc tttaataaag aatgggatag agagattctt cttaatatcc
                                                                     1500
ttaccctatt tgagaatata aatgacaaca taaaaaatga agggctcgca tcatccagga
                                                                     1560
aagaattcag cagaagttca cttttttct tattcaaaga gtctggagtt tgtgttaaga
                                                                     1620
aaatcaaagc actagcaaat cacaatgatc tggtggtgaa agtaaaagtc ctgaaagtat
                                                                     1680
taaccaaact ctaatttgga gtctgtccca aacaatattg agatatttgc agttggtacg
                                                                     1740
atgtgatttg taaattettt gttttteatt gtgcgtatat ggtaaagaga tetttteage
                                                                     1800
tgctattttg gaataatgac tatcatatat cataacagtg actgatgttg gttgtaatgg
                                                                     1860
ttgggtttag ggatgaccca ttttaaggat gcccaaatga aatattagga tttgggaccc
                                                                     1920
agaaagaatt tattgatttg atcttattac ctagattgag attttttaat ctttcctcta
                                                                     1980
cctaaactga caatgaattg gttatacatc atgcataaqc taccctttta tattagttta
                                                                     2040
tatttgttat tttaaaactt gtgtttcatc aataaagttg tgttttaagc agcagaaaaa
                                                                     2100
aaaaaaa
                                                                     2108
```

```
<210> 3394
<211> 1137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1134)...(427)
<223> similar to gi3882211 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3394
ttttttaaac tagtacacac ttaggtgcaa acctcggttt attacgttct ttggttaaat
                                                                       60
attgtttcta catcctttca gagcattagg agaacaaaga taatatttga tagaaagact
                                                                      120
gaaaacacaa tootttgott ttoagagaaa agactgaatt tacactggta ctgttagaaa
                                                                      180
ttettataat taggetagae gtetatttta gagaaagtta gggettttge tgttgettgt
                                                                      240
atgttttgaa aaatacattc ccctggggct agccaacatc actgtcctga gacccagacc
                                                                      300
ttcagggagt ctcttgataa aggctgctcc gcacatgggt caggaaaagt cggggtcagc
                                                                      360
tccatcatgt ccgaggactg catgggttca gtgttgccca tcactgcggc aacggcttct
                                                                      420
gcccaccatc tctttctgga atacagacag attttgggtg aaacctgtct ctgttcttga
                                                                      480
cggacaggtt ctgctccact ccttccatta ggtttctgaa gcactgggca aggacctcct
                                                                      540
gcttggggag gggctggctg tttatcaaac ttgctctcag ttcactgaaa tacttctcat
                                                                      600
tgagcaggat gagccccagg agaggcctgg atactgacca ctggttccga cagtcttcaa
                                                                      660
agacaatggt gttcatgagg acagacatca tctgctgcag gacatctggg ttttgctgca
                                                                      720
```

```
taaaatgtaa tagtctctga ccagcctggg tagcctctct gccatcgaag tggccttctt 780 gcccctcttt tgctatgtgc ttgaagaggt aggtgacgat gtagtctaaa ctggtacagc 840 agctggagga gacaactgta tcaagagtag tgagtcctc tgagatagat gtgagaacat 900 acatgagtac aggaggctct aagttgatga tgaagctcat atggtcctga gtgagacatt 960 ccaggagtgg ataataagac tggctcagtt tccggtattg tagcaagtca ctgtgggaca 1020 ctgacagcag cattttgaca aaagcctgga gtacattgtc aaaatggttg tccccataca 1080 acttgaagac gccaaagctg acataatttc cacacaaggc agacttgagc tcgtgcc 1137
```

```
<210> 3395
<211> 2457
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (51)...(1573)
<223> similar to gi530823 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3395 agcggccgca gaccctgaag ggacaccagg agaagattcg gcagcggcag tccatcctgc 60 ctcctcccca gggcccggcg cccatcccct tccagcaccg cggcggggat tccccggagg 120 ccaagaatcg cgtgggcccg caggtgccac tcagcgagcc aggtttccgc cgtcgggagt 180 cgcaggagga gccgcgggcc gtgctggctc agaagataga gaaggagacg caaatcctca 240 actgcgccct ggacgacatc gagtggtttg tggcccggct gcagaaggca gccgaggctt 300 tcaagcagct gaaccagcgg aaaaagggga agaagaaggg caagaaggcg ccagcagagg 360 gcgtcctcac actgcgggca cggcccccc tctgagggcg agttcatcga ctgcttccag 420 aaaatcaagc tggcgattaa cttgctggca aagctgcaga agcacatcca qaaccccagc 480 gccgcggagc tcgtgcactt cctcttcggg cctctggacc tgatcgtcaa cacctgcagt 540 ggcccagaca togcacgete egteteetge ceaetgetet eccgagatge egtggactte 600 ctgcgcggcc acctggtccc taaggagatg tcgctgtggg agtcactggg agagagctgg 660 atgcggcccc gttccgagtg gccgcgggag ccacaggtgc ccctctacgt gcccaagttc 720 cacagegget gggageetee tgtggatgtg etgeaggagg eeceetggga ggtggaggg 780 ctggcgtctg cccccatcga ggaggtgagt ccagtgagcc gacagtccat aagaaactcc 840 cagaagcaca gccccacttc agagcccacc cccccggggg atgccctacc accaqtcaqc 900 tccccacata ctcacagggg ctaccagcca acaccagcca tggccaagta cgtcaagatc 960 ctgtatgact tcacagcccg aaatgccaac gagctatcgg tgctcaagga tgaggtccta 1020 gaggtgctgg aggacggccg gcagtggtgg aagctgcgca gccgcagcgg ccaggcgggg 1080 tacgtgccct gcaacatcct aggcgaggcg cgaccggagg acgccggcgc cccgttcgag 1140 caggccggtc agaagtactg gggccccgcc agcccgaccc acaagctacc cccaagcttc 1200 ccggggaaca aagacgagct catgcagcac atggacgagg tcaacgacga gctcatccgg 1260 aaaatcagca acatcagggc gcagccacag aggcacttcc gcgtggagcg cagccagccc 1320 gtgagccagc cgctcaccta cgagtcgggt ccggacgagg tccgcgcctg gctggaagcc 1380 aaggccttca gcccgcggat cgtggagaac ctgggcatcc tgaccgggcc gcagctcttc 1440 tccctcaaca aggaggagct gaagaaagtg tgcggcgagg agggcgtccg cgtgtacagc 1500 cageteacea tgeagaagge etteetggag aageageaaa gtgggtegga getggaagaa 1560 ctcatgaaca agtttcattc catgaatcag aggaggggg aggacagcta ggcccagctg 1620 ccttgggctg gggcctgcgg aggggaagcc cacccacaat gcatggagta ttatttttat 1680 atgtgtatgt attttgtatc aaggacacgg agggggtgtg gtgctggcta gaggtccctg 1740 eccetytety gaggeacaae geceateett aggeeaaaea gtaeceaagg ceteageeea 1800

```
caccaagact aatctcagcc aaacctgctg cttggtggtg ccagcccctt gtccaccttc
                                                                     1860
tettgaggee acagaactee etggggetgg ggeetettte tetggeetee eetgtgeace
                                                                     1920
tggggggtcc tggcccctgt gatgctcccc catccccacc cacttctaca tccatccaca
                                                                     1980
ccccagggtg agctggagct ccaggctggc caggctgaac ctcgcacaca cgcagagttc
                                                                    2040
tgctccctga ggggggcccg ggaggggctc cagcaggagg ccgtgggtgc cattcggggg
                                                                    2100
aaagtggggg aacgacacac acttcacctg caagggccga caacgcaggg gacaccgtgc
                                                                    2160
eggetteaga cacteceage geceaetett acaggeceag gaetggaget ttetetggee
                                                                    2220
aagtttcagg ccaatgatcc ccgcatggtg ttgggggtgc tggtgtct tggtgcctgg
                                                                    2280
acttgagtct caccctacag atgagaggtg gctgaggcac cagggctaag caattaaacc
                                                                    2340
agttaagtct caaaaaaaaa aaaaaggggg ggccgtttta aagaaccctt gggggggccc
                                                                    2400
aagttaacgc gggctggcaa ggtaaaagtt ttttccttat agggagccgt ataaaac
                                                                    2457
```

```
<210> 3396
<211> 3398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3399)...(700)
<223> similar to gi2252820 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3396 tttttttttt tcaggttcaa aaacagtttg aggtttttta ttatccaagt ccctttgaaa 60 agataattaa ttgtacaagt gtcatcgcat gaaaaacaga ctcgggcagc ccctgctggc 120 cctagcctga gaaatgtaca tatttacacg ggccctcaga aaggaggacc caggactgca 180 cageeggegg etggaaggea ggtgeagtgt teegtegeeg atteacaeag tggeaggeaa 240 gtgacaagct gttttgaagg cactcggtgg cgcggacaat tgacagaggc ccttcaggcc 300 tctgcattcc gggcctgggc ccaagccaga cctggggtac gtgggcaaat cccagaggga 360 aagtagatcc cagcacacgt gcccaaggga ggtgccgggg gatggggggg gggtcacctg 420 aagctggcag cagggacctc ggctgcccca cttgggctgg gccctccaag tattgctatg 480 aggagtggtc caggctgcct ccttgggggc aggacagaag cttgtggacc acttggaggg 540 accccctacc tgcctctaga cacgggtaga ccacagggat gggtggtaca cccaacactg 600 ttccccatcg ggctcctgag tacgaggtca tctgcctggc cgtgacaccc gtgcccqcca 660 agggcctcgc ctggcacagc ggccagccca ccagcctatc agtccacctt ctccactttg 720 ecgatgatet teteeteaaa gaegggeagg aeggeetegt eetetegaae eteeteaaae 780 accaccccac agtcaaactc gtcgctcact ttcttgaagt agtatctgta gctgcccttt 840 ttggtcagca gctccttgaa ctggcccagg gtgacagcgc ggcccctcac cagggtgcgg 900 taggggatgg gttccccgca gaagtagtac gccacaacga tgctgtcaca cggctgggca 960 ctcccgccgc ccaccttcct ctgcgatctt gtctctgtct cggagagctc catgtccgac 1020 acggctggta ccacgtgcag caccggcgcg cacgctggcc tgacgcaggc gcgtccccqc 1080 cgcataacct cctgcacata cctctgcttg gagggtgctc ggctggctct cttttcttcc 1140 teetecagae gteggegege eteeteeage tgggttaggg ggttgggage tgggtggggt 1200 ggcatggtgg ggtcttggat gaagaggtgg gagggctgca cggaggtccg gagctgaggg 1260 ccggcccagg ggtgctcaag ggacaagggt ctggagttct catggggctg tggcttcctc 1320 gtccccgaag acccgtggcc ggtcctgcgg tgcctgctga tctccttttc cccctcaatg 1380 atccactgca tgattttctg gttcttctcc gcatcctccg aggcacctgg cacctcggtg 1440 ctggcgctct tccccgactc agccttcttg gcatttcttt tgcacgccac gcccaccttc 1500 ccactgtggg cgaggccatc actggcgttg ggggcagcgc caacactctc tgagtagcct 1560

```
cgggaccttg ccccatggct gtgtggttcc aggccccagg cgaagctgct ctgggccctg
                                                                     1620
cgggtggcct cggcctccac ctgctccttg ggccgggctg tgctgtggtg gacgtggtgg
                                                                     1680
tggacgtgtc ggtggtggtg caggccggcc gcgtccagct tcgcccctga cttgggtacg
                                                                     1740
tgcttcccgt gccccgaggc ggcacccccc agtgccactg gcatcttggc cacgtgccca
                                                                     1800
ctgtccgggg agcgatggcc aggcccaggc gactggcggc caggtgtcct cagcacacgc
                                                                     1860
tgtacgtgct cgtccaggat gctctcaggg ttctcctcgt gtgcatcccg gagcccggca
                                                                     1920
cagcccatgt ccacacagcg gggcgggaag tggtgccaag cgggggcggg aggcagcttg
                                                                     1980
tgacacggcc ctgggggccc tgacgatgga tcgccgtcct caccttcctc ctccatgcgc
                                                                     2040
acgcgcttca gccgctcctc cagcttctcc tcggcctccc gcgtgcgctg cacagcctcc
                                                                     2100
aggcggtgga tgagctcctc cgcgaacttt tgaggctcca cgcggacctc cttcggcacc
                                                                     2160
cggtacgtgc ggggaatgtg aggtaggggc acccgcccat tgacctgcac gctctcctgc
                                                                     2220
atctccctgc ggtgctgctt acggatcctg tatgggggga tcccatccac gctgctqtcc
                                                                     2280
gtgagggaca gggtgtctgc atcgctggac aggctctgct gctcgctgtc gttggcactg
                                                                     2340
gtggctgggg ccagggcata gccggcattg acataatagg ggttgactgg ctcccqccag
                                                                     2400
gatccatacc tgaactctct gccttcgctg taccgtctac tggaggagac cctcggggca
                                                                     2460
gctgtctcca ggagcagctt ctgagggagt cttccggggg gagcagcgtc tctgccatcg
                                                                     2520
tectegteea tgteetggte acaetteeat teeteatett catttaaggt eggeaggtat
                                                                     2580
ccagatatgc ccttccctgt ccctgaccca gagctctggt cactacagac tttggggctc
                                                                     2640
tccgagcctg tcctcgtata ttccaaataa atatcagact taaggaagga gggataggtg
                                                                     2700
ttttcctcca tagtggcctg gatttcggtc tgggcctggt caaacatggc aggatcgatc
                                                                     2760
agctgcttca tgatgcagcc ctttatgaag ctcttggtgg ctggcttggt ctgccgggac
                                                                     2820
acgatgccat tgttatcaag aatgtacttt cggtagatgg ctctcgccag cttcagcctc
                                                                     2880
ttctcctcgt tcgagtcaca gggctccagc ttcctgaagc cagtgcaggc aaaccagaag
                                                                     2940
tccagcaagt cggcacagcc ctcctgcttc aggaaagtcc tgaacaggct tatcccatct
                                                                     3000
tggtcatcca gcagggaatg cagtgactca gcccacttca agtatggtgg ggtgggggag
                                                                     3060
gcactgccct caggctcata ccccaggtcc agatccgagc gcctcggagt ggccgtcgaa
                                                                     3120
gtctcacctt taatgccaac acctttcccg gagcagaaac tgtagctggc gggcctcggg
                                                                     3180
tctgtggaca ccagttctcc ctcctcacca ggcactgggg gtcggggagc atcttcggtg
                                                                     3240
aaacttgctc cgaggtccaa ggggaaaccc tgctcttgga tattcatttt gggactctgc
                                                                     3300
gtcaaggaac aatgagcgct gcaccctaat acatcagtac ttacagctcc aaagtgaatc
                                                                     3360
aatctgtccc gcgcgcggtg gtggcgggac cccgggcc
                                                                     3398
```

```
<210> 3397
<211> 1372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1373)...(13)
<223> similar to gi3341990 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3397
ttttttttt ttctgtctgg actttatagg cattaaaggc ttgcttttt tcacttaact 60
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cattcgatgg tacccgcttt tctttcaata attctttaaa agcttgcttt gcctcttcct 180
ttgtattcca agtgtatgtt ttctttgctg gttggctctc ctcctcttct tttttgggag 240
taaaatcagc tacagtttct tgcttagatg tttcttctcc agtattactg gatacttcca 300
cactttgatc ctgaatagca ggggtactag taagttgtgc ttgttcctca gttgaaatag 360
```

```
ttactgtatt ctcattatct acaacagtag caacaatgga agtaacttca ggctcaggaa
                                                                      420
caactggaaa cagttccact gacagtatta gaagcagaag tggaagcatt agcattggct
                                                                      480
gcagctgctg ctcgtgctgc cgctgctqct gctgcaacaa caqcaqctqc tqcttcqqcc
                                                                      540
agcagccatg gtgctcattg tggtcggaat ttctgttgta gggactgggg ctgttgatgt
                                                                      600
tgtggtgcac tcttcttgct tactgctttc ttcagctttg atcattgcat gcagggttga
                                                                      660
atttggtata aagacttcca gcaacaatgg tattctggta tccttcaaga tcctcaagtt
                                                                      720
ctttaggttt ggcccagcga gattcttttg tttgagaatt ataatagtaa ggctttccag
                                                                      780
aatctgattt gtattccttc caggggcatt tagataaqaq ttqctcaqca qqtqttttaa
                                                                      840
gatcatctgg tttctcccag gtagactgtt tggtttcagt gttgtagtag taagtccttc
                                                                      900
catcaggtga tttatgttca gtccacattg attttgcacc agatgctgta cctgctgcta
                                                                      960
catccatact atttactcct ggcggtaagg caggctgcat ggaagcctga gacatatgag
                                                                     1020
acatcatcat tccaggcatt actgacgaca tcattccagg catttgtccc attggtggcc
                                                                     1080
ctcccatagg gggcatcatc tgcggcatca ttccatgagg tacaggaggc atattcqctc
                                                                     1140
tctgacccat agggtgcatt cccattgggg cataatgcat gccagggtgc cccatcgagg
                                                                     1200
gccgtctcct caggaagccg tcagcagaga cccaagagcc ggagcagagg cttgagccgg
                                                                     1260
acaateteeg eteceegtee ecaggaeeet gegagggagg atggetetee attteactea
                                                                     1320
ccatgaggcc tccacgctca gctcccgtcc ccggcctcat cgtcgggctc aq
                                                                     1372
```

```
<210> 3398
<211> 6305
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6306)...(269)
<223> similar to gi1504030 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3398 aaatttaacc ttgccaaccc cggggtatat aaacttgatc cttttaaacc ggcccccct 60 ttttttttt ttgtttttt aaaaagtatt tattttttac tagtgaggat ggaactaggg 120 gaagaagttt acagaaaaga tgtccatata caaagaaaga aatagcaaaa tatttttggt 180 cataatttag aaagaaacta atctataaaa tggaqacaat tctccccaat tcatctctct 240 catagaagag cataagcacg ggctctcagt tccttgatat cctcaagagg ccacggatac 300 gtctgacaag agcctgtatg aaactatatc gagatcgaac ttttgaatat aatccttcaa 360 tgtccagaag tttcttttgt agtgattctc caaaagcgtt gattgcatca gcctgaagct 420 ggtctaaatc atgttggctc actatagcca gcccacttct aaaatctaga ttggtttctg 480 aggcgaagga atcttgcagt cttctgcttt taaacaaggt tctcgaggca aataaggaat 540 cttgagaatc cgtgggcatg caatgtaaca agtagtactc cagatggcgc caaagaataa 600 ataggcaggt ctctatgata aaagaacaaa gggaaagcag tttagctcga ttgttgatca 660 ccttcaccaa gcgccgtctt gctagaacat atttctgagc agtggagatt ttatcaacac 720 cagcaggcat cacagactga cacaactctt ttatctcatc tggggggaagc tgctctacat 780 tttgtagctt gctgacactc tgtcgatgac tgtcataata gctgaagaaa tcattagcac 840 tetgtttcag caggtagatg ataatgeeta aaccaggeag gegeeagtat ggaaccaetg 900 gagettgggt atettgeege ggteeatete tattaactgt ttetgaaagg etaggagtga 960 agagacacac agcatgctgg aaggtagggg aactctgtaa catgagtgac tggcaatatt 1020 ccattacatt ggcacaaatc tgctgcatag ccagttcaat ctcatctttc ttgcttactt 1080 tatctccctc cacattatcg tcttgaaatt taaactgacg cagtctgtca gagccaccaa 1140 agcgacttag tagtcctaag cactggcgct ggaatcttcc aatatgtccc tgtagctcca 1200

ttagagaccc ttcatttaca tcaacgtcaa gttcacttaa tattccagga agtgctgctt 1260 tacttataat tcctgtcagc agagccaatt cctgcaaaga cccagcacta acatcctgac 1320 agcgcagaat tgcttgtatg gtatcagaat gtgaaataag aaactgcaat acctgccctg 1380 ctgcctgcaa gtgctgggcc atactagatg tgaggatgac ctggcacagc tggagagctg 1440 ggaggagaat ctggcggtag cgatccactg gggtagggat gaacattgga gggtctctca 1500 tgccaaacat gctctgcggg tccgtttctg ggcgcatgtc atagacttgg cattgagcta 1560 gtctcacaat cacccctgat cttagcagct ctaatgcacc ctgctgtatc tttgccactc 1620 ttgtgagaaa tgccatttta gattcataag tataaagtgc ttttaaaagg ggaggctgtg 1680 gggtgagtaa gctctgcaaa gtacggtcat cttctaccaa gctgtctacg aggaccttca 1740 agtagccact gttagaaaga tacaaaagcc actgctgctg tttatccacg gagacaattc 1800 tatcaagtag agccagggcc agcatccttc caatctcatg accatcacaa gcatctcgac 1860 agaccacttc catgagggcg gcgccataac tttcaataat ggctatgttt tctcgctqta 1920 atttgctaaa tacatcttca ggggctgtca gcctttccca catggttttc ttggctgctt 1980 ctaaggtgtc tggttcatca ggtctctggg caatctgtaa gtaataaagc agagagccat 2040 acaagtgagt cctcactcgt tggaatccac cacctgtctt caaaatgaag tctaacagtt 2100 tcttcaatat gatgtaaagt gaagaatctc caatagaagc aaaacccact aatgggttct 2160 cttcaggagg aggtgaggtg aagcaactat caagcataaa agcgtaatgg gcctctqctg 2220 gtcccaagac tgatgtttgc ttctgttcag tgaggacggc ctggcttagg tgagcagtca 2280 gtgtgaacac tgccccggcg accacaggca ttaactcttg cgcagcttca tcatccagta 2340 tettateatg cacatettgt aaaatateae gaataateag ttgtegatee tetgeetgaa 2400 tgaggtcctg gggacaagct gtcagtataa tttctactag ttgcctccac gactccagag 2460 catgacgttt tgcatgaaga cactgcagca atttatttct tcctaccaca tactgaagta 2520 cagtgctgat ttcctccatt agtagaggtc tctgtcctat ggctgccata ccctgaaggg 2580 catttacttc agctacaaga accctatgaa gaagcttgac attgcagact gtctgtcccc 2640 gtaaattett gtgtteacag ttageaataa ettgtteaat etgggeeega teaaaaaaat 2700 ccaactgcaa aggctcaggg atctcctgac tgaagtcaat cgagtcaaga atatttagaa 2760 tttttcgacg tacttttgta gcagtgtcaa agtgaaggaa cccagaaaca gacctgtttt 2820 catcttctat tcctccttca ccatctgagt atggtttcac tggcatgtca tccagtaaga 2880 ggtgtaggag cctctgggta tgtgaccgct gacgattcag agaggttacc cttagctcta 2940 ttgaggcagt tttcataagc catgacatct ggttcagcat agatatttca tattctttgt 3000 tagaaaatgg tagatactgc aactgggaaa ataagaaatc ctggctggtt ctcaagtacc 3060 tcatagtagg accagatgta tcagagcatg cacataactg atatatgacc tggtaacata 3120 gctcagccag ctgaggagat tctcgcaccg ccactgggcc tgttctccct tccgttcctt 3180 tctccaagat gtttagaatg gcgtgaaggc atgtccgagg gcaacctaac actcctqqat 3240 cttgtaggtt tgtagtactg acaggttttt tcaattcaaa gcccaacagg tagagagcaa 3300 gattgggtgg attgcattcc agagaggtaa tgagaagatt caagatgtgg attcttgttt 3360 catgacgaat tgcaactaat ttcttttcaa gttctgatcc ctcttccaga cgtacaaatt 3420 cttctgcatc ttcacaatcc aaacactcca caaatccagc cattagtttc tgacttatac 3480 tctggtcatg tgtgaaatct ccaaccaact ttatctgaat attagagttg caagagatac 3540 aacagaggat cttggcactt tcaaaagcca attctggatt agtattgcca tgatataggt 3600 atctggcaat gtttaccaca ttatctgcct tcttagttct gggattaatt ccctgcaaaa 3660 gctgttctaa aggacagact attagagcca gttgactctc tcttagaagg tccataaaaa 3720 gattttcctt ttgcagagta agattgagaa gtgcaaggca atgctgtact gctttctcca 3780 ggtgtttttt cccaggaaag ggggcatagg tgtcaagctg cttaactcct tcttccagta 3840 aactgagagc aagctccaac attggtgact cattcagcag atgatacatc agactaaatc 3900 caggtggctt ataggctatg atttcttctc cttgtagttc cacaaactgg tctacaaaat 3960 cttcaagctg aggctcataa tctctgagca atttataaaa cacctccaaa accacctcag 4020 caactteeca etttteaget geteteeggt aagetettgt aeggaategt agaaacaeag 4080 agtctctaag gaactgcaaa taagggtcaa agccaggggg ccgcagtcca gcacccaaat 4140 tagaaggaaa tgagctctcc accagagtac taataagctg gcaaaaggcc cgagtcaatg 4200 ggtattcttc acaccgggat tctatttcat ttagttcaac ctcaatacca atagcttgcc 4260 tttggcttgg aatcctcacg gtctgcagta tctgagtgta ttccaatgac tgccagaggg 4320 aagcagcaat ttcaggagat tttccaaaag ctgcgagtgt cttcagtagc tcagctttta 4380 ggacaggggg aatactgcat tggaggagtc ccagaatcac cacaacaggg gtccactgag 4440 ggtgttcaca gagggccaag cgagcatttt cactccaagt aatgatggta gacgtgagct 4500 gcaaaaaagc aatcaatcca tettgeteet tetgggtgat gecaegggaa ggaaggtgae 4560 ggtactggac actatctgca cttggaagat ccttccgaag gtgttcgtgg taaagcatca 4620

```
aggagtgaaa gaaatgttcc taaggaaaca ggactgccac ctgctccctg aatattttca
                                                                     4680
acatgactac taccattgac tttgagcagg ctgaaacagt agtgggcaca ctgaggccca
                                                                     4740
ttggccaatc cctggagcat cttcaaataa ggaatataaa tagttggagg caacaggtca
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cccatttgcc taacaaactt tgacaagaca acctggcgtt gagggggccg ctgatgagcc
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acccctagat aagagcccat gatagtcgga gtctgaagag gctctgtggg acaccaatat
                                                                     4920
tctagagcaa gctccagatg aaaagggttc tttttatata gctcgccaat caaaagcatt
                                                                     4980
aagtgttcca ggtcccttct aagtgaaatg gggggttcat tacccatctg catactcatg
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tgaatcattc gagcatcttc atctgcccga ttcctcagct gtttcacctt cattggcata
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agtgcaagga aatctgtgat gagattatgg actctgcgaa tataaaattc ttcctgataa
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aagtattctg ataccactac agattccatg aggaacagga aaacgttgtc agcaattgcg
                                                                     5220
agttctgcca ttgcttcatc tgcctctgtg aattctgcca gagctgtcac atcaggtagc
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tgggatatte ccetcaatge cagegeecag geaagtetaa cagtggettg gageecagge
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agtttccaaa gctgtgagtc ctgaagacga gagtgaattg ttgcaatgta ctgttttct
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gtcaacagtg gaagttgatg aatcatatca tctcgttcct ctgtgctttg ctctataaaa
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ctgatatcaa aacagtatag aagcgccata agaagagcca gattcactgc atccagtgag
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ccattagcct caactgtcac tctttccaaa tgtccaatga ggaggagagt gtcttctttg
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cctaaaggtg actggcaagc ccaggcaaaa aggctttctg caagagactg cctgcactcc
                                                                     5640
ttaatgagat cagaaacctc tttgcgatgt ttttcactgc ccaaacctct ctctcgctgt
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agtttctcaa actcattatt cacatcaatc tgtgacacca gcgtaagaac tttataagtc
                                                                     5760
aatcettget ceatcagete atetgtaaag egtgttgtea tggaageeag etetggaetg
                                                                     5820
agttctaggg tccatgtctt tccccgtcta gactgtatca aggctttcaa ggaattcgca
                                                                     5880
atgcatcgct ttccatccca gtacagaaga acagctacta atcctctggt aaggccagga
                                                                     5940
aaatgtggct gttgatgctc tccagcaaga agaagctcaa cagctgccaa ttctccaata
                                                                     6000
tcaaaaaggt cactgagaat aaaggcttct ttaatgagct gttcaggaag aagtcgagtt
                                                                     6060
ccctgttgac cctgaatggc gactccctct gtactggctt tctgaacctt ctcatgctgt
                                                                     6120
tgaacatttt ttggcggatt tttgaacaat gagatgaagt caggtttgtg tttcttcaaa
                                                                     6180
atettateaa gaaggtgaae agetteaggt tgtettetee aaagageatt teecaettta
                                                                     6240
tgccaaatgt ctttgtaagg accccataga ctagcagccg aatttaccgc caaaggcgtc
                                                                     6300
gccat
                                                                     6305
```

```
<210> 3399
<211> 2290
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2291)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2284)...(430)
<223> similar to gi29865 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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attaaanaaa acaattcaac ttttaaaagg gattacccat atgcaagaag aaggtattgc
                                                                      240
tatcacccat tctaaattcc cccaatgcat tcatttcctg ttcccttatc tttcaactct
                                                                      300
agtggcaaag taaagactga attgaaatta agctggcact acaacatcat taccagggat
                                                                      360
agacacataa acaaagtcat ttccaaataa ggaatgctgg atctccagaq aaqtqacaaa
                                                                      420
gaggagtcta ctgagttttg cactcaggca catccttgcc tgaggaggcg tgcccaagga
                                                                      480
cctggctgag aatccacact ctctgctcct gcattttgca cctctggaca aaggcctaaa
                                                                      540
cttgagttat caaaatagcg aactggatga ggtgatggta aagactttga tcggctatca
                                                                      600
aaaaaacaag attttggtga ttcctttggc acaggatctt gtaaattccg ttccttgcat
                                                                      660
tgagagggtg taatttgttt ctttttagaa gctgttccag tcactttagg agactttgga
                                                                      720
gaattctcac aagttacttg tttgtgagcc tctcttttaa gggttctttc cttccaagtt
                                                                      780
ttgacctcat tggaaagatg ctgattattg cttaacaatt cattcttttg ttttattagc
                                                                      840
tgttcatttt gctgctttaa cttagaaatt tcttttcta gccttatatg ttcacttttc
                                                                      900
aaaataagag cttttgtgtt ttgtacaatg ccgctgccac ctccacaagt taagggttta
                                                                      960
tttgaagget gaggateagt atgttetgat ateaetgagg tatettggge etgttgaett
                                                                     1020
cttctgagat tttctctcaa tagccttata acttcctttt gatattctac agtggctttt
                                                                     1080
gtagcactga tttccttttc aaattctttg gcatttttca ttttctctag gtctattttc
                                                                     1140
ccaagettea ttttgagate tteaatttet tetttatatg gettagetee taaageaact
                                                                     1200
ttgtcctgaa gtacttgaat tgtctctttt gttttttcaa ggcatttatt tgattcatga
                                                                     1260
actttggctt gaagttttgc tattatgtca ttagtcacct caagttcttt ctgcatcttt
                                                                     1320
ataatcttgc tttccttatg catagcactt tctttagctt catgcagtga attttccagc
                                                                     1380
tetegaattt tetetgtggt taaetgtgta getettgatg taaeatgagg attettattg
                                                                     1440
tcttgtgtgg taggattaac ctgggcacca gatgccaagg aagtcttcaa tgtttggtag
                                                                     1500
tttttaaata gtttttcatt tttctctttc agtgatttca ggtcctgttc ccactctttg
                                                                     1560
gatatggtag cacttettte etcaaaetet gttgatteat teattatgge aattattetg
                                                                     1620
ttattaaaga agttattcac ttgacaaatc ctatcatttt ctttctggat gccattttta
                                                                     1680
agcttttcta tatcaaaacg agtatttaac cactcttcca aaaactgtgt catttctttc
                                                                     1740
ctattactta gtacttgttg aaattcagtc tttatgctag ggaactcact ttctgagaaa
                                                                     1800
tetttgagaa ttteeteaat atgtagatee atattetggt teaatttgag ateeettaat
                                                                     1860
tctctggatg gtacatcaca atcttgttga aggtgctgta ttttaattag caattccttt
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tgcttttcca cttcatcaat aaaatccatt tcaaatttat tgatggattc atgttgttct
                                                                     1980
tcttttattt ttgtaacata gcttaacaca tacttcagtt tcttcatgat tctgtggaat
                                                                     2040
tccatggagc atctctggtt tgcagtaaaa agtttttcaa tgtgtttggt ttgtaaatag
                                                                     2100
ggaagtgaga ggtttgcttt aactctcatt gaaagctctt tttggaattc aatttccttc
                                                                     2160
tccaagtcaa gagacaatct attcaagcac tcataatgat catccatctc tgagtatctc
                                                                     2220
ttcaaaagct cttttattct agagcacttt tctctcaggc tttccgtaag gtgctcgtgc
                                                                     2280
cgaattccgc
                                                                     2290
```

```
<210> 3400
<211> 5221
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5222)...(2576)
<223> similar to gi3043712 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters
```

<400> 3400 ttttttttt ttaaaagaat attgatttat tacccaacaa agcagggatt tccccagttt 60

ttttcaatta cacacaca agcacacaca atagcagaat gaaattacat ttttcacatc 120 taaaggttta tacctcaaag aaaataggca tgtgtccaaa agacaattag aaagcaagaa 180 atctttcctt ttactttgaa tatgggaaaa tcttttaaca gagactcttt ccgggcaaac 240 caatgaagat ttagggcata ggaaaatgct tgtcacctta aggtttttaa atataactgt 300 attcacccaa atcaaggttt ttactaggaa gtttttacgg tttttatggt attaaaaatc 360 caccttttgg gccggggttg caggggccca cgccattaat cccggcactt tgggaggccg 420 aggcgggtgg atcacaaggt caggagttcg agaccagcct ggccaatatg ctgaaacccc 480 atctctacta aaagtataaa aaattagctg ggtgtggtgg qacqcqcctg ttgtcccagt 540 tacttgggag gctgaggcag gagaatcgct tgaacccggg aggcggaggt tgcagtaagc 600 cgagatcacg ccactgcact ccagcctggg caacagagtg agactccatc tcaaaaaaac 660 aaacaaacaa acaaacaaaa aaacttttgt tttaagtggc tggagaccta tgtggctaga 720 cttactactg tttaaatatg ctaaaatgga tacataattt attcttcaca gctcaaaatt 780 caatgtaaag ccaaatatta attttgtcca gtagagaaat taaatgttta caaaaccaaa 840 gtatggaaca gttgttggcc tatgtaaatt gaaatgtaat tgaccatttt attttcaaac 900 atgettaate tteaegtgte ttttteaeat tgatacteat tttgeagaaa taagatgaet 960 ggtactaatt tagacaataa acaaactaca ccaagcacat tttagtaaag atattttggt 1020 ggaacgcaaa gtaattaacg atgaaaacat ttggtaatat ccatttacta atatgttacc 1080 aggttcttca atgtttacat gacttgctca tattagtaga aatgtcattt taaaatattt 1140 tcacacttca tgcactggag ttagtttaag aagggaaggc tcttttaaaa tgtttataaa 1200 gaagaaaata cctttttaaa gagaaaatgt ctaagtgaga ggacataaac ttatggctca 1260 ttattttttg acctagttaa gaatataaat ttcaatggct acttaagaat atacaaaacc 1320 caaactgaaa gcaattcttc aatttattca ggcaagcaag tcaaaaaaat aattttgtca 1380 ttactggcac agatccaatc cactgttcaa agacatgact ttggactgtc tattttccta 1440 taagatttat tttttaaaag aagataattt gtttggttct actaattagt ataacttaga 1500 gataaacaaa tgattttccc atttaattct tttgcggtga aagaaaacag tttaaactag 1560 attttctaag ataatgggta catcaacatt gtaagaaagg ccctataggc ttaagttcta 1620 aaaacattac ggttttaaag aaatcaatgc ttttccatca ctctttacat aacactgaga 1680 aatttcaaat ataaattgta gaaaccagta tatgaaattt taagaaaaat cttactaaaa 1740 ataattataa aatgctttta gaaatgtaag atgtaaaata taattgactt taaataaaat 1800 aaaaaaaagc aacccctgcc cccacacttt aaaaggttat tctttaaaaa cccttgtcac 1860 ctaattttat tctcagtcaa tcttttggtt gtattttgca tcatctagtg gccaccttgc 1920 agcatttcaa agcagttctg ctaccatttt tgaaccccag tgcttttttc cccttgaaat 1980 accaataaaa ttatagcatc aagtttcata aaactttctt ttaaaggccc ataaaattcc 2040 atttcctact ggagataagg taatcttttt taataggaag aaatgactag atctgtcata 2100 aattattact atacattaga cattttcata tcaatttttt aaaattaaat ataacattgg 2160 gagaaactag gacttaggct ctagagtcat ctttaggctc taaaagtaat taaagttact 2220 ctgcaattaa agctcagggc taccatataa gtaacttctt gtgattaacc cttcttccac 2280 tgtacctttg atttgtaata ttaagtacat tttaacatga gaactgaatg actcatggtc 2340 agagtgccaa gaactcaagt tcaaccaaga ctgaagaaga cttaactttt actaccagct 2400 gctattttgg aaaggtcatt atagtttcca ttatcaacct atttgtattt aaaagcaggt 2460 ttccaaaaat aactgetttt egttttagtg aateteettt tatteagttg agecataett 2520 ataaacagaa tttaacaaaa aaaattccca agttccctct ctttactttt attaagaagg 2580 ttgagtgaat gtaatacggc gccgccgcct ttggaaagcc tttaaattcc atgtgtttgg 2640 ttccagcata tgagggccat tgtagacaaa caaaactgtc atcttttcag aataaggaag 2700 attttgcagg agctttggtg ttatgaaaaa gtattgagat gtattttctt tacaggcagt 2760 atttacaacc atttcaaaca ctctccgttc attgattggg tccattccct gattgatttc 2820 atcaactact ctgaatggac atctatttag ctcctgaagt gccatcaagt ataacatggt 2880 agaaacactt ctttcacctc cactttgatg atgaggagtt aattcatgca gttgagtact 2940 acttcgaaat ttgactctaa ttcgaattcc atatttatca taatcttcct cattttctgt 3000 atggagatca acttcaccag cacactgcat ggaactaaaa aaattgctga atttttcatt 3060 aattttttct accagctctt ttaaaggatt aagccacctt tcttttacct gtgaaatgtt 3120 ttccctgtat tgatctagtt caactttctt tccctttagt tcctcagtta actgttctat 3180 ttettettet etttttgtat atteetgaae aattgtagga tteagteeeg tgaageagga 3240 agetettgat etttetteag ttaataaage ateaatttea teeaatgtgt ttggaaqgte 3300 ttggaaaacc atggggagtg aggagttgtg tccatttgga atggtgggta cttgtgtctg 3360 gtattcttga ggaagagtct gctctgcacc caggttatca tacttgccta gctcttttca 3420 taagttcctt gcatttctgc aataatctct gtctattttc atccaattca atgaaatgtt 3480

ttccttccg

```
gctctgtaag acggagttgt gaagatgcgg ccatataatc tgattctaat ttgttcttct
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cagagatcac tgtagtattt tggagaatta aatctacttt ttgtatatgc aaagaagtac
                                                                     3600
aaatctttat taggtttgtt aattcggtaa caagtttcgc tttttgaaca tttatttctt
                                                                     3660
tgattttggt acttgctttt cgctcttcct cttcaagatt gcaagtatcc tgttccatca
                                                                     3720
gctttaaact tcctagtttg gaactgattt tttgttccag ttgtcttttc ttggttttc
                                                                     3780
tctcaagaag ctccttcttc ttttgtctaa gttcattgtc tttgtgctcc agatgtttgc
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ttagctgttc ttctaagtgt cttctctgct ctaggtccac agtgacagtg agaaactgcg
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ttctttctct ggtcttttca gttcctacag gaacttcatg aatatgatac tgacagcaaa
                                                                     4140
ggtaactcat tacaggatca ggtgcatcaa ataattctct caaataagag aaaaatccgt
                                                                     4200
attgtttaag ttcattcaaa gatcttgaag gtgctttgtc tgcatatgaa ctcttgggag
                                                                     4260
caataacagc atttactctt aattttttat tgtcacgaac ctctttgagg aaaacctcca
                                                                     4320
tatcttcttg actttcaaat acaaaggctc ttaagtcatt tgatggaata tgattttcaa
                                                                     4380
tatatttggc atttttatta tettteatat tgategtgag eattatggge teacagaete
                                                                     4440
tttgtttaaa tttgtctctg ttatttctta gccataaaac agcatcatac gtgtcacgga
                                                                     4500
atctctgtct tagcttatct tccttctgat tcataagatt gtcaaaacgt acaatatgat
                                                                     4560
cgtccacact ctttttctcc ttctctaqag tttccctctc tcttcgctta tcaattattt
                                                                     4620
cgccttcaca taatgccttt tcatcctgaa tccgtctcag atcatttgta atggcatcaa
                                                                     4680
tctggggctg aagattctcg cagttttccg tggtctttag ttcattttgc aaatcctcta
                                                                     4740
tcattttgcg ggtattacct attctcctct gtcggtcaag ctcttcattt tgctttacta
                                                                     4800
ttaaagcctg ctgaagttcc tcaatatgtt tatctttcct ttctataaca tcttgcttct
                                                                     4860
gtttgcattt ttgagatgcc tccttaatat ctgttgcctt ttctttgatt cgagcctcca
                                                                     4920
aattgtgacg ctcgttttcc atttcttcaa ttcgacatgt tataggaatc tgcccttctt
                                                                     4980
taagttttct gacctcttcc ttcactcggt cacqaactag ttttacttct tcatattcct
                                                                     5040
gacgaacatt ttcatattcc acccatggcc tttttgcttc aagcatctca attaaatcta
                                                                     5100
aatgtcgctt ccgttcatag aacctctcca catcttgttt atatctttca ttcctctqaa
                                                                     5160
ccattttctg tagatactca gttttctctt tgcatgaggt ctcgagctgt ttttcttct
                                                                     5220
                                                                     5221
     <210> 3401
     <211> 309
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (253)...(11)
     <223> similar to gi4567174 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3401
ctcgaggcct agtcgagcag ggatggctcg gctgggcgga taatggtggg ccggctgggc
                                                                       60
gcagcagggg gtcttctggg cactcctggg ggaatccctg gggggatccg aactggccga
                                                                      120
gatgggatct gaggcggggc tgggaagagg tcactgttgg caaacacgct ctggggtcca
                                                                      180
ggcacgggat gggattgtgg gcgccccaaa agaggctttt gtcgccacgc tgacaagaat
                                                                      240
```

300

309

ctgggggggc cccagacggg cccaagatct ctttggtqct qtactaqcaa aaatctacta

```
<210> 3402
<211> 3542
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3543)...(1622)
<223> similar to gi1469888 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3402 cgatataaag gccatcttat ttcttctccc actttttgtg ggtgacttct tggtatccgg 60 ggcttttcag tgacagccgg ggcgacaggc caggctgagc ctgtggctcc agggtccaaa 120 gagaaaggag ggcagaaata agagaagatg gcctttattg cagcacgaac ttgaggggga 180 ctgcatgtcc cacagctctc cagggagctg ccaaaggcaa cgggcccgcc ctgccctgc 240 aacaggccct ccaggggctt agagcatggc tcccctcagg aagggtaacg cgtgcttqta 300 aacaagggcc cagacaacac agagaggaga ggcagcatca tcatgtgcag ctttgctaca 360 agaaagatag ttcttaattt caaagaggag acaccgctac acctagccct gccctcccat 420 gcactggaag gctctggaag tagctctcgc ctgcctgggc agttaggtcc acccactgcc 480 cgtgagctgg gcccaggcac actgcagcca cacaaaaacg ctggcagctg actcctaatt 540 tcagaaacac aattagaaaa gaactggaat tttacatttt tctcccatac attaaaaaat 600 aagaaaaagc caacattttg actgtagacc ctggtaggtg gcatctgact ttaacctqaa 660 gttctcattg gaatcctttt ctgtctggcg ctccaccgcc cacaatcagc cccagcccca 720 ggatccttcg gcaaggggcg cctggggctg gggctcattg gaatcctttt ctgtctggcg 780 etecacegee cacaateage eccageeeca ggegeeett geegaaggat eetggeeeat 840 ctcacacaag ggcgggaccc cgtggagtgc ccggcgagca gggcaaccac tgggaagaca 900 gatactgatt tccctgttgg ggtctgtgac cctcagcaaa cgaaaaggaa acggtaacaa 960 gacggtggcc tcctgccagg acctcagcag gaggtttgct ggtgaaggtt ctgggtgagc 1020 tggaatgggt gataaggcgg gcttgctggg tggtggcctc aggctgttcc tgggcccctg 1080 tegeatagag ceetgtgggt geagtgtggg geeceaeage egteeegggg tegteetgat 1140 gcataagagc agagaccccg gaagagaaac ccgcctgccc cgtgtgatac agggctccca 1200 aacgetteee ggtggaacee tgeteeegag gacacettgt etegeteeae ggaaceette 1260 ccccagcacc ccctggaaac acagcagcca ggaacaaatt ctccatgcca ggaacgaagc 1320 ccttggctaa actggagact catcagtgca cagatggtgg tgaggggtga gggcagggcg 1380 tggggtggtg ctcagccctg gggacaccat cactgtcctg ctctgaccca caggtgagag 1440 gaggatgctg tgctcccgga gtgtggcgcc gggaggatgg ctcggcagga cagaggcctg 1500 gggctgaggc tatgcccagg gccggtgtgg ggagggacat gggggccttt gcagaagcag 1560 ctcagagaac tgaggttgga atcctgcccc aagcacaggt tttggggaca gcgagtgcct 1620 agacaaggca ggtaacgtgg cagccaccgg gctggtccag aaacaaggtg ctgaagacgt 1680 cgttgaagaa ggtggggtgg tacctgcagg ctcgctcaca gtcggggttg aagttcacct 1740 ccaggatctg cggctgcatc acccgccttc catctgggcc gttgtcccac ttcagcatga 1800 ggtcgacggc atacatggcc cgggatgagg ggtagtcgca gaggcccagg ggtggtggct 1860 tggcacaggc cacctggaac agctccgtga aggcccggaa gatctcagcc tggacgtccg 1920 tccagggaaa ttctgggtat tgcttctcaa actcggggat gaactcttca cagtgcacct 1980 getteageae cacateeggg teatagttea tgacegtgaa agtgettete qtaagteate 2040 ccaggtcgtt gagtgcaaaa ggcccggttg gagaaccgca agcccagaac acatcataca 2100 cgaacaaccg taggggcctc actgaccgca gcagcacgat gtagcggatg tcgaacttga 2160 cettteceae gtettetega aggaacaaca egggaettte gatgtaettg gacacaacet 2220 tgggggtget eteteggtge eggatgatge tgtgeagget ettggtgaeg tgggtgteea 2280

```
ggctgcgcgc caggttccag ggcttgcaga tccagtggtt gtcctcgccc cacctttccc
                                                                     2340
gctgctggaa gtagctgaca aactggggca gctcagtgcg caggttgaag gttcgggga
                                                                     2400
gccagggtgg gccctcgggg ccacctgccc gggcgcgcga tggaggccag gcagtccttg
                                                                     2460
acagtcagca ggttctcgca ggggaactgg ttcagcagca cqcctqqcct ctcctqqctq
                                                                     2520
agtttcctgt agtccttgaa gtgtgagaag ttgaagagga tgtcggcgtc cgcctcactc
                                                                     2580
tgggtgaggg tgaagcgcgg gtgggtgagg ctgctggcca cctgctgcac gtccgtgtag
                                                                     2640
accttgaaga tgtggccgtg ggggtgcacc acggggttga tgtcaagtgg cagcttctcc
                                                                     2700
ttgttttcct ccagaatggc ctggtagtgc tcggcgggcg gctcgggtgt gcaagagctg
                                                                     2760
aggtccagca tgtcggtggg ggcccagggc agcagcatgc acttccggat cagggggtcc
                                                                     2820
gtctctccgt aggcaaagtc tcgggtcacc tcctcgccag tgtccaggtc cctcaggggc
                                                                     2880
cacagcagcg tgtaggccac ctgctgcggc atgtagaaga agggtgccgt ggcgaagctg
                                                                    2940
ggcacgtccg cgtgctggat ccgcgaaccg aactcgtcca tgatatacca caccqqcatc
                                                                     3000
ttctcctcag ctgtcccatg ggccagctgg taggtctggt tgaacttcca catctcctcc
                                                                     3060
agcaccaggg ccacagcctc tgtactgggc agctcaccgt ggaactcaat gcccatcagg
                                                                     3120
ttggccatgc ggtgcagcag cccgggcacc tgctgcagct gctggcgcgc gtgctccaca
                                                                     3180
eggeaegtee aggegtggte gatgaggaag atgetgttgg ggtgggetge etggageeeg
                                                                     3240
ctctccctgg tcacgatgac cttgtagcac agctcgttcc ccgggttggg ctqctqcttc
                                                                     3300
cgcacctccc gggctgcctc qtcctcctcc tcttctacct cctccacttg catgatccca
                                                                     3360
aacacttccc cagcgtcgaa aacctcgtgc tccagcttgt gcaggaggcg gccccagtaa
                                                                     3420
cgttcgggga cccccgaagc gcgcagcgcc gggccgtgca gcgccgcgaa ctcggccaag
                                                                    3480
geotgegege cetecteegg egtetggece gggetgetae geteegeagg ceggegeteg
                                                                    3540
gg
                                                                    3542
```

```
<210> 3403
<211> 1750
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1751)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1752)...(1407)
<223> similar to gi3925215 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3403
aaagatcgaa ccccaattct attctattct gacataatgc tcataatgct cctaaaggaa
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120
catcccaatg gaaaaaaatc acactaagaa taaaacactt acagaacggc aagaaaactg
                                                               180
ggttaacata taaatttgtg tctgttgaaa ccagagtaca tgctagaaaa cattaacaca
                                                               240
gatacgacag agtgtggttt ttttttagaa atgggtaatt tctctctcca gtatcctttc
                                                               300
acttgtatga gatatttete eteteetgtt tteacaaace aagaaateee caggtaggee
                                                               360
aatcccagag gtgccattta gcagtatgca gcagcccagt ttcagcataa caaaacatgc
                                                               420
cttggtagtg gctctctcat gcaaataaaa gaaagcttaa gaaattcttg ttgtaggtgg
                                                               480
attaggcaag gctgccattc agctggtata agctaaaagt aaaaaatcaa aacgctcaag
                                                               540
aaaacggaca caattttgga atgattaaag atgtctttat aaagtttttt tcaagacttc
                                                               600
```

```
attctaaata cacagaataa aaaatggtgt cagctcactt gtaagacacc aaccagattt
                                                                  660
tccttatact gtctcaaaat ttaaagatca atttccccag agggtgtgca atgcatcata
                                                                  720
aaatggccct tttttgagga tgggagagga agggttgggc aggatggaat attaaattgt
                                                                  780
aacatgataa acatgcaaga ctgttatcca atctagataa tttatataca ttttgatgac
                                                                  840
ttaggaaaac aaagcaatca tttgtgacaa gcctaaaaag cttgacatat ttaacatact
                                                                  900
taggaacttt ttttgtgcgg tgggaattct ctaattgtat catgtgggcc ttttgaaagt
                                                                  960
aacaaacaga aggccagtct gttgcaagtt tgctgctgaa catcacattc caccctaaga
                                                                 1020
1080
tgtcagtgca aagtatggac taaactgctt tcaggaaaaa agttgtaaaa attgatacag
                                                                 1140
gttggaaaag ggaattttcc ttcccggctt ggagtcctcc caatttaagg cagaacccat
                                                                 1200
ccactccaat ttctgcagtt taaaactttc tctacttatt tagttttctc ctctgagttc
                                                                 1260
aaccgctgct ggattcgttt ggcataactt tgtgccatgg agttaatgat agataggatg
                                                                 1320
aagtaacaca ccatgacaac gaccaacttt tcaaacatcc aggacaacca gttttctccc
                                                                 1380
tgtggtgtgc ccatttcgct tttgtggtga agcttctgcc gttgagcctc caggtactcc
                                                                 1440
tgaaatggct tctgcagaga tggacctatg ccggggacag caccaatgaa agccaccatt
                                                                 1500
tgctccacta tgtgcttgct gaatgttatt ataacaaaaa ttttctggat atgcattttt
                                                                 1560
attattgctt ttccaattag gttgcaccaa gaggtccaac caatcaacaa ncaagngttt
                                                                 1620
tgaccccatg aaatgtgtcc acacgttatt ccagccagat caaataaagg atttggcaat
                                                                 1680
tgaagcacag gccaaaattc caaaaaatcc aactttctgt actagttttt gaactgccag
                                                                 1740
tttggcccgg
                                                                 1750
```

```
<210> 3404
<211> 2487
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2488)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2488)...(186)
<223> similar to gi36122 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3404
ttttttttt ttactatcta caaaaattta ttatatattt acagaagaaa agcatgcata
                                                                       60
tcattaaaca aataaaatac tttttatcac aacacagtac atatttgtca tttttaaaaa
                                                                      120
gccacacaat agaaacaaga caccaagata tttaattatc ttgttgactc ctgtaaaata
                                                                      180
gctaaacact catcattcgc ggtgcaatac tcatagacat aagttcctga aacaatagtt
                                                                      240
tgcatgcgta aggcattcgc accaaagaaa tctgggtttt attgcggcag cccctgcatt
                                                                      300
catatgtatg ggtcctggtg ttggcaatcg ccattattcc acaaagattg caaacatgaa
                                                                      360
cctgatatgg atctgatgcc tcaaacaatc tttcccttaa aaactgggct gctccatggg
                                                                      420
caatctgaca atctcgttcc atttctccaa aacgcaggcc accatcacga gatctaccct
                                                                      480
ccatgggctg tctattgagg atctgaatag gtcccctagc acgagagtga atcttatcat
                                                                      540
ccaccatatg cttcaaacgc tggtaataag tggggccaat aaatatttgt gatgtgattt
                                                                      600
ttcgaccagt gaacccattg tacaggacct catttcctct gagatgatag ccataatcag
                                                                      660
ataaaagatt agaaatcttc tgcacgttaa cagcatcatt aaatggagtg gcatcaccaa
                                                                     720
```

```
tttcaccett gttageegat acetteeett gaaggeatte aattaagtga eeaatagtea
                                                                      780
tacgagaggg gatggcatgg ggattgatga tgatatcagg ggtgatacct tcacaggtga
                                                                      840
aaggcatatc ctcttgtcta tactgaatac cacaagtacc cttttggacc atgtcgaact
                                                                      900
agcaaattgt ctcccaatct gtgggaaccc ctaacagagc gtacccctta ttttaacaaa
                                                                      960
atttaatatc ccttccctgg attgaagagt tacccataac ctgatcccac aatgcccgtc
                                                                     1020
tcactagttc ctgagaaaag tgctacagtc tcttcttggt atagcggtct attggtgctc
                                                                     1080
tcccaaattc atcttcattt tccaggcaag gtgactgttt tgcctataat aacatcatct
                                                                     1140
cctgatacca cgaaccccct gggagctatc aaaaccnatc atcatccagc ttgtcgtaaa
                                                                     1200
tggcatgcgc gtcntgccct ggcatggttc acgtgtaggc ttctcaaaaa cttcttcttg
                                                                     1260
atcaaatcct tttttagact cctgttcttt gtatgagcga tagaaaacag acctgaagaa
                                                                     1320
gccgcggtcc tacagctgaa cgattcatga taacagagtc ttccctgatt atatcccagt
                                                                     1380
gtatgatgca atggccacaa ttgagttgat gcctgctggc agctctctaa atcgtagata
                                                                     1440
ttccatagac cgtgtagtca caagtggctt ttgaggataa tagagaacat gggccaatgt
                                                                     1500
gtccatgcga acatggaagt tggtgatgta aactcccata gcctgcttac ccatagcaga
                                                                     1560
ctggtatgtg tttctagggg actggttatg atcaggaaag ggaataatag atgcacagac
                                                                     1620
accaaggate attgagggat gaateteaca gtgtgtatat gtggaacaat aagetaette
                                                                     1680
tttctcctgt aaatcatctg gagtcattgc aagcatcact gtttcttctt ccagggtatc
                                                                     1740
aatatactcc actaccccac tggccacaag atcctgccaa ctatagttgt tatattctct
                                                                     1800
ctctttcaat tggtcaatat gcctcttctt caaaagtagc ttttgttttt ccacaatcag
                                                                     1860
aagtggtcta caaatacggc ctgcatccgt atagatccga atctccctct ctcgaatatc
                                                                     1920
tctgatcata gaaacttcag acacaatgat gtccatctga cgtctcaatt tccttagggt
                                                                     1980
gttcataagt tgttcgggat ctttatgtat tccaacccag cagccattaa caaaaatctt
                                                                     2040
ggttgcatca gcaatagctg caggagaaat ttcttctaaa ttttccatac tccattcttc
                                                                     2100
taaaaattcc agaattggag atggttgaga tccaactgaa atatacgcca tcaaggctaa
                                                                     2160
attetteaca agteetacag catggeeete tggggteteg geaggaeaca ceatteeeca
                                                                     2220
caacgtatta tgcaactgtc ttggttttgc tagcttgccg tctctaccaa taggagaatt
                                                                     2280
taaacgacgc aggtgagaaa gagtagacgc aaaagtcagg cggtttaaca cctgagatac
                                                                     2340
tecagetetg gettgatgag etttettttg atcaceceag tttecagtag etaaagagta
                                                                     2400
ttttaggcca tcagatatga tccgtgtttt aattgccaac tccaagttaa aatcctttcc
                                                                     2460
tcgatcaata aatttctgtg catagat
                                                                     2487
    <210> 3405
    <211> 1333
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (18)...(960)
    <223> similar to gi2506078 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3405
```

```
<400> 3405
aagcttggca cgagggtctt gtcagcagcc cggccattgg agcatatctt tctgccagtt 60
acggagacag cctcgttgtg ctggtggcca cagtggtggc tcttctggac atctgcttca 120
tcttagtggc tgttccagaa tctctgcctg agaaaatgag accggtttcc tggggagctc 180
agatttcttg gaaacaagca gacccttttg cgtcgttgaa gaaagttgga aaagattcta 240
ctgtcttact aaatctgcat caccgtgtgt ctttcatacc ttcctgaagc tgggacagta 300
ttcaagtttt ttttctctat ctcagggcag gtcatagggt ttgggatctg ttaaaattgc 360
agcattcata gctatggtag gaattctgtc tattgtggct cagacggcct ttcttagcat 420
```

```
cttgatgaga tcattaggaa ataagaatac tgtcctcctt ggcttgggct tccagatgct
                                                                      480
ccagttagcc tggtacggtt ttggatcaca ggcctggatg atgtgggcag cagggaccgt
                                                                      540
ggctgccatg tccagcatca cgtttccggc aatcagtgcc ctcgtctctc ggaatgcaga
                                                                      600
gtcagatcag caaggagttg cccaggggat cataactgga ataagaggac tatgcaatgg
                                                                      660
cctggggcca gcactgtatg gcttcatatt ctacatgttc catgtggaac tgactgagtt
                                                                      720
gggcccgaaa ttgaattcta acaacgttcc cctgcaggga gctgtcatcc caggcccgcc
                                                                      780
gtttttattt ggggcatgta tagtccttat gtcttttctg gctgccttat tcattcctga
                                                                      840
atacagtaaa gccagtggag ttcaaaaaca cagtaacagc agcagcggca gcctgaccaa
                                                                      900
caccccagaa cggggcagtg atgaggacat tgagccacta ctgcaagaca gcagcatctg
                                                                      960
ggagctctct tcatttgagg agcctgggaa tcagtgcact gagctgtaaa ctcggcagaa
                                                                     1020
agtgggattc tgcatacgcc atctctgaga gccatggagg gagccacacc cctggtgact
                                                                     1080
tcatggtgct ggatgggaga cgctagcggc atccttcagg gccaagtttg ataaatacca
                                                                     1140
ccgccatcat tctgctcatc ctcctcctgt ttttttttt ctcttacatt cttttttt
                                                                     1200
tcccggttaa tccttaaaac cagaaaaaaa ttggaaaaac ttctttgcaa aaagggggca
                                                                     1260
actcccaggg ggaacctcaa ataaaaaaag cattcttttg tgaaaaaagg agggcttcct
                                                                     1320
tgaaaggaca aaa
                                                                     1333
```

```
<210> 3406
     <211> 2127
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (18)...(1455)
     <223> similar to gi5006265 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3406
tgctcattgg ggcccaggtg ctcctgggca tcggtgctac ccctgtgcag cccctgggcg
                                                                       60
tetectaeat egaegaeeae gtgeggagga aggaeteete getetatata ggaateetgt
                                                                      120
tcacgatgct ggtatttgga ccagcctgcg ggtttatcct gggctctttc tgtaccaaaa
                                                                      180
tctacgtgga tgcggtcttc attgacacaa gtaacctgga catcactccg gacgaccccc
                                                                      240
gctggatcgg agcctggtgg ggtggctttc tgctctgcgg tgccttactc ttcttctctt
                                                                      300
ccctcttgat gtttgggttt ccacagtccc tgcccccgca ctcagacccc gccatggaaa
                                                                      360
gcgagcaggc catgctctcc gaaagagaat acgagagacc caagcccagc aacggggtcc
                                                                      420
tgaggcaccc cctggagcca gacagcagtg cctcctgttt ccagcagctg agagtgatcc
                                                                      480
cgaaggtcac caagcacctg ctctcaaacc ctgtgttcac ctgcatcatc ctggccgcct
                                                                      540
gcatggagat tgcagtggtg gctggcttcg ctgccttttt ggggaagtac ctggagcagc
                                                                      600
agtttaacct caccacctct tctgccaacc agctgcttgg gatgactgcg atcccgtgtg
                                                                      660
cttgtctggg tatcttcctg ggaggtcttt tggtgaagaa gctcagcctg tctgcctgg
                                                                      720
gggccattcg gatggccatg ctcgtcaacc tggtgtccac tgcttgctac gtctccttcc
                                                                      780
tetteetggg etgegaeact ggeeetgtgg etggggttae tgtteeetat ggaaacagea
                                                                      840
cagcacctgg ctcagccctg gacccctact cgccctgcaa taataactgt gaatgccaaa
                                                                      900
ccgattcctt cactccagtg tgtggggcag atggcatcac ctacctgtct gcctgctttg
                                                                      960
ctggctgcaa cagcacgaat ctcacgggct gtgcgtgcct caccaccgtc cctgctgaga
                                                                     1020
acgcaaccgt ggttcctgga aaatgcccca gtcctgggtg ccaagaggcc ttcctcactt
                                                                     1080
tectetgtgt gatgtgtate tgcageetga teggtgeeat ggeacagaea eceteagtea
                                                                     1140
tcatcctcat caggacagtc agccctgaac tcaagtctta cgctttggga gttctttttc
                                                                     1200
tcctccttcg tttgttgggc ttcatccctc cacccctcat cttcggggct ggcatcgact
                                                                     1260
```

```
ccacctgcct gttctggagc acgttctgtg gggagcaagg cgcctgcgtc ctctacgaca
                                                                     1320
atgtggtcta ccgatacctg tatgtcagca tcgccatcgc gctcaaatcc ttcgccttca
                                                                     1380
tcctgtacac caccacgtgg cagtgcctga ggaaaaacta taaacgctac atcaaaaacc
                                                                     1440
acgagggcgg gctgagcacc agcacagagt accaagacat tgagactgag aaaacctgcc
                                                                     1500
ccgaatcaca ttcaccttca gaagactcct ttgtgagaag ctgagggcct ggccctcttc
                                                                     1560
ctcttcctgg agagaacagc cctccaccac ccacagacct cgcgggcctc acttagcgtg
                                                                     1620
ctcctccctg tccgagaacc cgagggtccc catgtggatt atccagccag tgtgtggtcc
                                                                     1680
tttgaggccc caagcgcagg cctgtgatga ggaccaaaga ggtgacttat ggtcaggagt
                                                                     1740
actccaaaca gctctcagag taggcatctt tcctgggtct ctaaagagtc atgctgacct
                                                                     1800
ggtgtgcaaa ttcccttcca cccatccctc tacctcctct ggggatggct tgccgacatg
                                                                     1860
ctttagaaac tcccctcttg ggaatgctcc tctgactgag ggctccaaca qctttaatga
                                                                     1920
aatcagccga gagggtaaaa accaacctgt tgcattgaat ggagggggga aaaagcacat
                                                                     1980
actcaataga tttttgagtg tggtactctg tatttttgca gcgtttattt tccaaatgag
                                                                    2040
cagtttagaa atatgtgatg taaagtacat actgtacgtt tgctgaaaat tatattaaaa
                                                                    2100
gcactatttt aattcttaaa aaaaaaa
                                                                    2127
```

```
<210> 3407
     <211> 1859
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1860)...(794)
     <223> similar to gi5262712 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3407
aagtotoatg gtgattgato ttogtotgog tggggtgtat ggttgttaat otttototot
                                                                       60
ggcagttagg gcacacacga attcctagca tccccactcc agcgaaacac ttgtgcacag
                                                                      120
attacaaaca ccaatatgat tttattcaaa cacaggcaag aacaatgacc ttcagagctg
                                                                      180
ggtaaaaata ataagttaaa agcatggtta gaattttaga caatcagata aaaagtttga
                                                                      240
aggaagtgat ttccccttcc tctcctaatt gattaattca acacagcata aaaataattt
                                                                      300
gtatctataa aatatccttg ttcccacaca aatgaactgg aggtggccct aggatttcct
                                                                      360
tgactatggc acaatgcaca caatctacat gtccctcctc cccaactttt aaggcaaaaa
                                                                      420
tggtcctgca tcttcagggc agagggtggg ctcatgccag cagtcagctg tgtcaaggac
                                                                      480
actggggggc gtttctccac cgaaagatgc ctgcttgggt cccacttggg cgcggattcc
                                                                      540
attttatttc tagcctttgc ctcaccacag aaaaaaggag ctgaaattct ggcaagtgga
                                                                      600
cactggactg gtttggggca ctcctccagt ctgggctgac cgggtctctt gaggcatccg
                                                                      660
tggcctaggc aagtggtggt ttcaggactg tgacagccct gaaggagcca gacctggtgc
                                                                      720
ctcctgcaag ctggacaaag ctgacggagg gtgggcaggt gtctccttcc ccccaqcccc
                                                                      780
tcaggctgcg tcagtctttc tgggagtact gagaagaaaa tatccgtgca atcctgagag
                                                                      840
tttcttcctc aggcaggttg agggggagcg agttaggtct ggggcgacaa ggcctttggg
                                                                      900
agagagetee eetggtgget tegetettgt eetgatetgt tgtggetget ggtggeaaag
                                                                      960
ttgctgagag tgaaagcatc cgcagggaag cctccaactg ctggggaggc aaaaaaagt
                                                                     1020
tgggcaccac aatgggccct gggagcagga ggctctgctt tgtggacgtc tctgatccag
                                                                     1080
ttgtcacctg cctctgcctg atgtcagagg agtcgatggg tggtccctta tggttttccc
                                                                     1140
ttctgctctg ggaggctaga tttagcggca acttcttgaa gctatcagca gagtcaccga
                                                                     1200
gctcactggt ggcagcttca ttctcagctg gggcctctga cttgggctcc ttgttctgat
                                                                     1260
ctgtctgtgg tgagctccat ccaacaaacg tgctgctctg ttgagctcct gagagtgttg
```

1320

```
ggcatgggat gggctgaggg ttggctgagg cagactcgcc accaaccctg gccttagagg
                                                                     1380
cctcacactc acaagcaaca agactttggc taggagaacc ctgcctaggc aggtggggt
                                                                     1440
tgacagecet ttetgggetg gagagaaage taettttgae cataagetee tetetgeaga
                                                                     1500
aaggccctgg agaaggacaa gaggggcctt ccctctgcac ctcgtcaggc tgagggctga
                                                                     1560
tgacctcact tgtgtctgat atgacactag accaagggct agttttgtct gtcaccgtgg
                                                                     1620
tgatctcatt taaggtcctg ggctcaatga tgtcttcttc atagtcctca tcactgtagg
                                                                     1680
ctggcgcctg cctcagtgtc ttcactgctc tgcatccttg taatgggtac tgcatgcctc
                                                                     1740
agggactcat ggagcattct tcctccattt gaagtctctt cgagaggagg gggtgatggg
                                                                     1800
gaatctgtgc ctttatctgg agctcttacc aatggctcat ctggcattgt gcatcgttc
                                                                     1859
```

```
<210> 3408
<211> 2578
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1951)
<223> similar to gi3334741 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3408 atggcggcag gcctggccac gtggctgcct tttgctcggg cagcagcagt gggctggctg 60 cccctggccc agcaacccct gcccccggca ccgggggtga aggcatctcg aggagatgag 120 gttctggtgg tgaacgtgag cggacggcgc tttgagactt ggaagaatac gctggaccgc 180 tacccagaca ccttgctggg cagctcggag aaggaattct tctacgatgc tgactcaggc 240 gagtacttct tcgatcgcga ccctgacatg ttccgccatg tgctgaactt ctaccgaacg 300 gggcggctgc attgcccacg gcaggagtgc atccaggcct tcgacgaaga gctggctttc 360 tacggeetgg tteeegaget agteggtgae tgetgeettg aagagtateg ggaeegaaag 420 aaggagaatg ccgagcgcct ggcagaggat gaggaggcag agcaggccgg ggacggccca 480 gccctgccag caggcagctc cctgcggcag cggctctggc gggccttcga gaatccacac 540 acgagcaccg cagccctcgt tttctactat gtgaccggct tcttcatcgc cgtgtcggtc 600 ategecaatg tggtggagae cateceatge egeggetetg caegeaggte eteaagggag 660 cagecetgtg gegaaegett eccaeaggee tttttetgea tggaeaeage etgtgtaete 720 atattcacag gtgaatacct cctgcggctg tttgccgccc ccagccgttg ccgcttcctg 780 cggagtgtca tgagcctcat cgacgtggtg gccatcctgc cctactacat tgggcttttg 840 gtgcccaaga acgacgatgt ctctggcgcc tttgtcaccc tgcgtgtgtt ccgggtgttt 900 cgcatcttca agttctccag gcactcacag ggcttgagga ttctgggcta cacactcaag 960 agetgtgeet etgagetggg ettteteete tttteeetaa eeatggeeat eateatettt 1020 gccactgtca tgttttatgc tgagaagggc acaaacaaga ccaactttac aagcatccct 1080 gcggccttct ggtataccat tgtcaccatg accacgcttg gctacggaga catggtgccc 1140 agcaccattg ctggcaagat tttcgggtcc atctgctcac tcagtggcgt cttggtcatt 1200 gccctgcctg tgccagtcat tgtgtccaac tttagccgca tctaccacca gaaccagcgg 1260 gctgacaagc gccgagcaca gcagaaggtg cgcttggcaa ggatccgatt ggcaaagagt 1320 ggtaccacca atgccttcct gcagtacaag cagaatgggg gccttgagga cagcggcagt 1380 ggcgaggaac aggctgtttg tgtcaggaac cgttctgcct ttgaacagca acatcaccac 1440 ttgctgcact gtctagagaa gacaacgtgc catgagttca cagatgagct caccttcagt 1500 gaagccctgg gagccgtctc gccgggtggc cgcaccagcc gtagcacctc tgtgtcttcc 1560 cagccagtgg gacccggaag cctgctgtct tcttgctgcc ctcgcagggc caagcgccgc 1620 gccatccgcc ttgccaactc cactgcctca gtcagccgtg gcaggcatgc aggagctgga 1680

```
catgctggca gggcttgcgc aggagccatg cccttcaga gccgctccag ccttcaatgc
                                                                     1740
caagccccat gacagccttg acctgaactg cgacagcggg ggacttcgtg gctgccatta
                                                                     1800
tcagcatccc tacccctcct gccaacaccc cagatgagag ccaaccttcc tcccctggcg
                                                                     1860
gcggtggcag ggccggcagc accetcagga actecagect gggtaccect tgcctettee
                                                                     1920
ccgagactgt caagatctca tccctgtgag gggtaggcct gctgattcag agggtcctct
                                                                     1980
tcatttttgg gaactccttt ccaaagccat atttttggga ggcagagagg ggcaggcttg
                                                                     2040
ggcacccett etgeecece caetgagaae tatgcaatgg agttteatga aatggtecae
                                                                     2100
atagtgggga agtagccagg aaatgagaaa cttcctccca ccccagacat ttttcctggt
                                                                     2160
gggagctgaa gcactgggct tccacaggcc cctggcctcc ttgccctagc acactgggac
                                                                     2220
tggccccact ctcccagctg gactcctgca tgctcctccc cttgggctct cagatgaagg
                                                                     2280
caaagctttg atccgacatc tgagctctag cctaagaagg agagttgaga tttcctcctc
                                                                     2340
cctctggctg ggatatggag ctttggaggt tcagagaaga gaaccctcac ctctgatctg
                                                                     2400
qcctctacga gaggtcctca tctccatctg gcccaacaat tcccagattc tgaagcttgg
                                                                     2460
gaatgcaaac acaggcttca tggggctgtg gccttctggc aggcgacctg ccatccccag
                                                                     2520
ggccttgcct gagggggttc aggcttgcct tttcccaaca cacactcaga taggcaca
                                                                    2578
```

```
<210> 3409
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1298)...(766)
<223> similar to gi424102 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3409 gcatgtggtc tgtgtgtggg gtggagggct gggggtgttg gcaagtctca caggtgagga 60 cccaacgagg gaatcagaca aaaagtggcc acaaattagg cagctccagg aaggacatgt 120 ccttgccata gtaagatgtt ctgctcacgc gtatccacga gaaagccccg catttcacgg 180 ggagcataga aacaggagtc cccaactctg ctcaccagct cctccggctg ctgccatctg 240 ctcctgcagc atggcggcct gggaagcctg cactggtgat tttctgccac tcaagttttg 300 cagacttcgg gaagatggat gcatagcctg gggcaatgac agtcacaggc ccgccttgtc 360 acaaggtccc tggagcgggc aatgccttga gcccaaaggc tgggagcaca aagccatctt 420 cagccatcct cgatttccag caagacccca gggctcaccc aacagcccga cactccatac 480 tacaaggtgg gttaattttt taaaagactc tgcagaaata taccaactac agagctcagg 540 aaagcaactg atttataaaa cccaatccaa gttgtttgct tttatagcat tagagacatg 600 tctgaagaac ttcaagtttt tatctataga aacataatta gtttaataaa ttactaggtc 660 tattttgaat atctaaattg agtactttta ttagacctaa gtggaacttt atctgaatct 720 gaattttcca aggggccagt gtagagtgac acaggtgtcc gaggccacct ttccatcttc 780 agacaccccc ccgtctctct gcacagggag ttggccttcc agtaggtgtt gctcttctgt 840 cttgacgtct cctggaaaga tttttatctc tattttcctg tggtggggtt ttccacgagc 900 taattctttc tatttttaaa ctcattggct ttggaggagc tgaattgtta gatgacgatc 960 tttgtcccca ggaagagtgg ccactctgga ttcttgtggc cagcgtattt gggtattgtc 1020 tcttcatcag ctgacagagg tgaaattttt ccaaaagcag gttccaatgc cagagtgtgc 1080 gattettgcc ccgcgtgtgg ggacgctgca gatttettec tggcttteca ccgctgcage 1140 tgcagagctc tcagcttttc tcggagctcc atgttctgct ccctcaaagc atctatatga 1200 ctccggagtt ttccatgaac atcagcccac agagacttct gtctcccaag ctcttggtgg 1260 agtctgatga tctgctgctg taatggctgg tccccaacag tcactactgc caggatcaga 1320

```
<210> 3410
     <211> 715
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (8) ... (625)
     <223> similar to gi4314286 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3410
gcacgagegg cegeteaege tgeattaeeg ceagaatggt geceagaagt cetgggaett
                                                                       60
catgaagacg catgacagcg tgaccgttct cttattcaac tcttctcqqa qqaqcctqqt
                                                                      120
gttggtgaag cagttccggc cagctgtgta tgcgggtgag gtggagcgcc gcttcccagg
                                                                      180
gtccctagca gctgtagacc aggacgggcc tcgggagcta cagccagccc tgcccggctc
                                                                      240
agcqqgggtg acagttgagc tgtgtgccgg cctcgtggac cagcctgggc tctcgctgga
                                                                      300
ggaagtgget tgeaaggagg ettgggagga gtgtggetae eacttggeee eetetgatet
                                                                      360
gcgccgggtc gccacatact ggtctggagt gggactgact ggctccagac agaccatgtt
                                                                      420
ctacacagag gtgacagatg cccagcgtag cggtccaggt gggggcctgg tggaggaggg
                                                                      480
tgagctcatt gaggtggtgc acctgcccct ggaaggcgcc caggcctttg cagacgaccc
                                                                      540
ggacatecee aagaceeteg gegteatett tggtgtetea tggtteetea geeaqqtqqe
                                                                      600
ccccaaccct ggatctccag tggagactcc agggttctag acagaggcca gtcttggcca
                                                                      660
ctcaccccac accccgcgga ccccaataaa ggcttgcata gctccaaaaa aaaaa
                                                                      715
    <210> 3411
    <211> 6388
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(5874)
    <223> similar to gi5689555 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3411
cttccccctg ttaccatgtc agggaaatat ataatggaag aacatgatag ttattcggat
                                                                       60
caggtgtgga gtatagatga actgccttct aaacaaggtt actatttaca gggaaattat
                                                                      120
ctgcgttgtg tggcagaagt tggttccttt gaacataatc ttacaactga tcttctaaac
                                                                      180
cacttggtat ttgtacagaa agtgttcatg aaggaagtta atgaagtaat acaaaaagtt
                                                                      240
```

tctggtgggg agcagcctat tcctctctgg aacgaacatg atggaacagc agatggagat 300 aaacctaaaa ttctcctcta ttccctaaac ttgcagttca agggtattca agtaacggcc 360 actactccat caatgagagc tgtaagattt gaaactggat tgattgaact ggaactttct 420 aaccgacttc aaaccaaagc ttcaccagga agtagcagct atctgaaact gtttggcaaa 480 tgccaggtgg atttaaatct ggcattagga caaattgtca aacatcaggt ttatgaggaa 540 qctggttctg attttcatca agttgcctat tttaaaaacca gaattggatt aagaaatgcc 600 ctccgagaag aaatcagtgg ttcttcagat agggaagctg tgcttattac tttgaataga 660 ccaattgttt atgcacagcc tgtggccttt gatagagctg tgctgttttg gctgaattat 720 aagggccgcc tatgacaact ggaatgaaca acgaatggct ttacataagg atattcatat 780 ggctacaaag gaagtagtag atatgctacc tggtatccag caaacatcag cccaggcctt 840 tgggactcct tttctccagc tcactgtcaa tgatctggga atttgcctac ctatcacaaa 900 tactgcacag tctaatcata ctggagacct tgacactggt tctgctttgg tattaaccat 960 tgaaagtact ctcatcactg catgetette agagtetetg gttageaaag ggeattteaa 1020 aaacttttgt atccgttttg ctgatggatt tgagacatca tgggatgact ggaaaccaqa 1080 aattcatggg gatttagtga tgaatgcctg tgtagttcca gatggcacct atgaagtatg 1140 ttcaagaact acaggacaag cagcagctga aagcagtagt gctggaacct ggacactcaa 1200 1260 cgtattgtgg aaaatgtgtg ggattgatgt tcacatggat cctaacattg gcaaaaggct taatgctctg ggcaatactc ttacaacact gacaggagag gaagacatag atgacattgc 1320 tgacttaaat tcagtgaaca tagctgacct gtcagatgag gatgaagttg atactatgtc 1380 tcccactatc catactgaag ccacagatta tcgaagacag gcagcatctg ctagccagcc 1440 gggagaactt agaggaagaa aaattatgaa gcgtatagtg gatatcagag aactgaatga 1500 acaggccaaa gtaatagatg atctgaaaaa attaggtgca agtgaaggaa ccataaacca 1560 ggaaattcaa cgttaccaac agttagaatc tgtggctgtg aatgacatta gaagagatgt 1620 tcgtaaaaaa ttacggaggt ccagtatgcg ggctgcttcc ctaaaggata agtggggttt 1680 gagttacaaa ccaagttaca gccgatcaaa aagcatttct gcttctggaa gaccacctct 1740 taagcgaatg gaaagggcaa gttctcgagt aggagaaact gaagagctcc cagaaatccg 1800 tgtggatgca gcatctcctg gacctagagt aacttttaat atccaggata catttccaga 1860 ggagacagaa ctggaccttt tgtcagtaac cattgaaggt ccatcccatt attcatcaaa 1920 tagtgaagga tcatgttctg tgttcagttc tcccaaaact ccaggaggct tttcaccagg 1980 cattcctttc caaactgaag agggccgacg ggatgacagt ttgtcttcta ccagtgaaga 2040 ttccgagaag gatgaaaaag atgaagacca tgagagggaa aggttttata tttacaggaa 2100 acceteacat acgtetegta aaaaagcaac aggetttget getgtteate agetatttae 2160 agaacgctgg ccaacaacac cagtcaatag aagtcttagt ggcacagcta cagagagaaa 2220 tattgacttt gaacttgata tacgggttga aattgatagt ggaaaatgtg tactccaccc 2280 aaccaccctt ctacaagaac atgatgatat aagtttgaga aggagttatg atcgaagttc 2340 caggagctta gatcaagatt caccttcaaa aaagaagaag tttcaaacta attatgcttc 2400 taccacccat ttaatgaccg gcaagaaagt gccatcatct ctacagacaa agcctagtga 2460 cttagaaaca acagtatttt acattcccgg agttgatgta aagttgcatt acaattccaa 2520 gacgctaaag actgaatcac ctaatgcctc caggggatct tccttgccaa gaacactgtc 2580 caaagagtcc aagctgtatg gtatgaaaga tagtgcaaca tctcctcctt ctcctcttt 2640 accttccact gtccagagca agactaacac cttacttcct ccccagcccc cacctattcc 2700 tgcagccaaa ggaaaaggaa gtggaggagt aaaaacagcc aagttatatg cctqqqtaqc 2760 acttcagtca ttgccagaag aaatggttat tagtccctgc ctattagact ttctqqaaaa 2820 agctctggaa actatcccaa ttacaccagt tgaaaggaat tatacagctg tcagctcaca 2880 agatgaagat atgggacatt ttgaaatacc agatcctatg gaagaatcaa caacatcact 2940 agtgtcgtct tcaacatctg cttactcttc cttccctgta gatqttqtqq tttatqtacq 3000 agttcagccc tcacagatca aatttagctg tttaccagta tcaagagtag aatgcatgtt 3060 aaagctgcca tccctggatt tggtgttttc ttcaaaccga ggagaactgg agactttagg 3120 gactacatat cctgcagaga ctttatcccc tggaggtaat gctactcaga gtggaacaaa 3180 gacttctgct agcaaaactg gaataccagg ttcatcggga ttaggcagcc ctcttggccg 3240 aagtcgacat agtagtagtc agtcagacct gaccagttcc agcagtagtt catctggctt 3300 gagetteact geatgeatgt etgaetttte eetttatgta ttteateeat atggageagg 3360 gaaacaaata actgctgttt ctggcctcac acctggatca ggaggattag ggaatgtgga 3420 tgaggagccc acttcagtca ctggtcgaaa agattcactc agtataaacc ttgagtttgt 3480 aaaagtgagt ttgtcacgga tcaggcgttc aggaggtgcc tcattttttg aaagtcagtc 3540 tgtaagcaag tctgcaagca aaatggatac tacgttaata aatatatctg ctgtttgtga 3600 tatagggtct gcctccttta aatatgatat gcgccgactc agtgaaattc tggcatttcc 3660

```
aagagcatgg tatagaagaa gtattgcaag acgtctattc cttggagacc aaactataaa
                                                                     3720
tttgccaaca tctggcccag ggacacctga ttccattgaa ggggtaagcc aacacctttc
                                                                     3780
ccctgaatca tcaagaaaag cttactgcaa gacctgggag cagccaagtc agtcagcctc
                                                                     3840
cttcacccac atgcctcagt cacctaatgt gttcaatgag catatgacaa acagcaccat
                                                                     3900
gtcaccaggg acagtaggac agagcctaaa atccccagct tccataagat caaggagtgt
                                                                     3960
atctgattct tcagttcctc gaagagattc actttcaaaa acatcaactc cttttaacaa
                                                                     4020
atcaaacaaa gcagcaagcc aacaagggac cccatgggaa acacttgtcg tgtttgctat
                                                                     4080
caacttgaag caattaaacg ttcaaatgaa tatgagtaat gtaatgggaa atacaacttg
                                                                     4140
gacaactagt ggtttgaaga gccagggccg tctgtcagta ggaagtaatc gtgatcgaga
                                                                     4200
gatcagcatg tetgttggte tgggaagate acaattagat tetaaaggag gagtagttgg
                                                                     4260
agggaccata gatgtcaatg ctttggagat ggttgctcat atttctgaac atccaaatca
                                                                     4320
gcaacccagt cacaaaattc agattactat gggttctact gaagctcgtg ttgattacat
                                                                     4380
gggctcaagt atcctcatgg gcatcttcag taatgctgat cttaagcttc aggatgaatg
                                                                     4440
gaaagtaaac ttgtataata cattggattc aagcataact gataaaagtg agattttcgt
                                                                     4500
ccatggagat ttgaagtggg atattttcca agtaatgata tcaaggtcaa ccacaccaga
                                                                     4560
tctgataaaa ataggaatga agctccagga atttttcaca caacaatttg ataccagcaa
                                                                     4620
acgagetetg tetacetggg gaccagttee ttacetteeg ecaaagacaa tgactageaa
                                                                     4680
cctagaaaaa agttcacaag aacaattact tgatgcagca catcatcgac actggcctgg
                                                                     4740
agtattgaag gtggtatcag gatgccacat atccttattt cagattccat taccagaaga
                                                                     4800
tggaatgcaa tttggaggat caatgagctt acatggaaat catatgacac tggcatgttt
                                                                     4860
tcatggtcca aattttcgtt caaaatcttg ggcccttttt catttagaag aaccaaatat
                                                                     4920
tgctttttgg actgaagctc agaaaatctg ggaagatggc tccagtgatc attctacata
                                                                     4980
tattgtacaa acactagatt ttcacctggg tcataatact atggttacca aaccatgtgg
                                                                     5040
tgctttggaa agtcctatgg caacaataac caagataaca aggcgtcgcc atgaaaatcc
                                                                     5100
accccatgga gtagcaagtg tgaaagaatg gttcaattat gttacagcta caaggaatga
                                                                     5160
agagctaaat ctgcttcgta atgttgatgc taacaacact gagaatagca ctactgtgaa
                                                                     5220
gaattctagt ttgttgagtg gattcagagg aggttctagc tacaaccatg aaacagagac
                                                                     5280
tatctttgca ttaccaagga tgcagcttga ctttaaatcc attcatgttc aagaaccaca
                                                                     5340
ggagccttca ttacaggatg ccagcctgaa gccaaaagta gaatgtagtg tggtgacaga
                                                                     5400
gttcactgac cacatttgtg tgactatgga tgctgagctc atcatgtttc ttcatgattt
                                                                     5460
agtatcagct tatcttaaag aaaaagaaaa agccatcttt ccacctcgga ttttatctac
                                                                     5520
tcgaccagga caaaaaagtc caattattat acatgacgac aattcctctg ataaagatag
                                                                     5580
agaagatagc atcacttata ctactgtgga ctggagagat tttatgtgca atacatggca
                                                                     5640
tctagaacct actcttagat taatttcttg gactggaaga aagattgatc cagtaggtgt
                                                                     5700
tgattatatt cttcaaaaat tgggctttca tcatgctagg actactattc ctaaatggct
                                                                     5760
tcaaagagga gtcatggatc cactggacaa ggttctgtca gttcttatca aaaagctcgg
                                                                     5820
tactgcacta caggatgaaa aggaaaagaa aggcaaagac aaagaagaac actaaaaaag
                                                                     5880
taatttgatc tgtgaacaaa ttatgattgt gtctgtttta ttacactgga gtgtttttt
                                                                     5940
agtataataa tttgaaatat aactttaaaa taattctaaa tttgtggcta taattaaaag
                                                                     6000
tttgtaagtt aacctgttct agttccatca ttctgtgtac agtgaagtat tgcatgataa
                                                                     6060
tgtaaatttt gtgaaaaact agattaaaat atataactgc ttgttatggt ttataattat
                                                                     6120
ataatqtqca atacaattcc tgcatcttta aaatgtctgc agaataactg tgaatttttt
                                                                     6180
tgttattgga ttggccgtaa cttttagaaa aaaatcttgt tgatgataat gtgattttgg
                                                                     6240
ggaggtcatt aattgctttt tcttttttaa atgtagactt atataaatac ctgtttgtat
                                                                     6300
atagcttgag taattgtgat atgattgtat accactaaaa tattgttaac tattataata
                                                                     6360
aagtcacagt aatggtttaa aaaaaaaa
                                                                     6388
```

```
<210> 3412
```

<220>

<211> 1862

<212> DNA

<213> Homo sapiens

```
<221> misc_feature
<222> (5)...(234)
<223> similar to gi1872200 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3412
tttcgtgcaa cctccacctc ctgggctcaa acaattctcc tgcctcagct tcccgtgtag
                                                                       60
ctgggactac aggtgtgcac cactacgctg ggctaatttt tgtatttttt ggtagagatg
                                                                      120
gggtttcgcc atgttagcca ggctgctctt gaactcctga cctcaagtga tccacccgcc
                                                                      180
tcagcctccc aaagtgctag gattacagat gtgagacacc gtgcccagcc tcatatattt
                                                                      240
tttgatgaaa gtctgctgag gatgaattct gtccactttt attatctgaa aacatcttta
                                                                      300
ttttgcctca ttttaaatag tatttagatt gggtgtagac ttctatattg ccaattagtt
                                                                      360
tcttttagca ctgtaaatac agatgtccag tattttcaga ttcagttatt tcagctgaaa
                                                                      420
agctagctga aagtcttgtt gctcctctga aggtaatatg actttttca aaaaatacat
                                                                      480
ttataaaatt ttttttcttt gccttgatag ttgtactaca agggtgcctg gatgagactt
                                                                      540
tctctgaatt tgtcttgctt ggggttcata gaatctgtga cttgatgtct ttcatgagtt
                                                                      600
ttgaaaaatg ctagccttta tctcttaaat attgctatta ctctactccc tcttcttt
                                                                      660
cagatatttc agttacacca atggccaatg tttgctcatg tctcatatgt ctcttgttct
                                                                      720
agtttctgga tttgtattct tttttccttt tcacattcag tctggatatt ttctgctgac
                                                                      780
ctatattcca gttcactaat aatgcttttc actgtatcta atttgcttat aaatagaaaa
                                                                      840
ccattgattg agttattaat ttcagttata gaatagccag tgtagactcc aatgcttggc
                                                                      900
tocacttoto cactttttog cotattttt toaccatctt coattttott caacacca
                                                                      960
gtcagagtca tttttaaaga cattttaaac acctcagtgg cctgtagatc ttatcttctg
                                                                     1020
ttttttgttt ctttttaatc ttagtttttt ggcacacttg gagggttttg attgaatgct
                                                                     1080
agacatagta ttcaggaagg cagagaggat tttttttaa gtcagatttt ttgaggtata
                                                                     1140
atttaataca gtaaaattca cctattttag ttcagttcta agagtttcct ctgtgacttt
                                                                     1200
tcctttggcc catggtttat ttaaaattgt gttcttttac ttccaaatta tttgggattt
                                                                     1260
ttctagatat ctttctgttc ttgatttctg gcttacctct atcagggtca gagaacaaac
                                                                     1320
ttaatatgat ttcaattatt ttaaatttgc caatgtttat tttatggccc agaatatggt
                                                                     1380
ctatgttggt gaaagttcaa tttgaacttg aaaagaatat gttttatgct gttgtctact
                                                                     1440
gaaaagtcta tatataaaaa atagattaat aaactgatta atagcctggt tcaccacttt
                                                                     1500
cgtagcctta ctgattttct ggttagtcat tctgttgatt actaacagat tctctaacag
                                                                     1560
agaagtataa gctttctaac tataatggtg ggttaatctg tttctcgttt cagttctagc
                                                                     1620
agatgtttcc tcaatttttg acgttgcatt tttaggtgaa tgcacttctg gaattgtatt
                                                                     1680
gtgtccttgc tgaattgtcc cttttatcaa catgtaatag caccctttat tcttgataat
                                                                     1740
agtetttgtt etgaatttta etttgtetgt tatteetata geettteeaa ttttettteg
                                                                     1800
cttggatttt acgcgataag ttttttcccc cattttactt tttagcaact ttatattttt
                                                                    1860
ta
                                                                    1862
```

```
<210> 3413
<211> 1832
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1204)
<223> similar to gi498725 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3413
attcatacag gagagaaccc ctatgaatgc catgaatgtg ggaaagcctt cagtcggaaa
                                                                       60
taccagctta tttcacacca gagaactcat gcaggagaga agccttatga atgcaccgac
                                                                      120
tgtggaaagg cttttggttt aaagtcacag cttattatac accagagaac tcatacaggg
                                                                      180
gagaaaccat ttgaatgtag tgagtgtcag aaagccttta atacaaagtc aaacctgatt
                                                                      240
gtacatcaga gaactcatac aggagagaaa ccctatagtt gtaatgaatg tggaaaagcc
                                                                      300
tttacgttca aatcacagct cattgtacat aaaggagtgc acactggagt aaaaccctat
                                                                      360
ggatgcagtc aatgtgcaaa aacctttagt ttgaagtccc agctcattgt acatcagaga
                                                                      420
agtcacacag gagtaaaacc atatggatgc agtgagtgtg ggaaagcctt caggagcaag
                                                                      480
tcatacctta ttatacatat gagaactcat acaggagaga aaccacatga gtgcagggaa
                                                                      540
tgcgggaaat cctttagttt caattcacaa ctcattgtgc atcagagaat tcacacagga
                                                                      600
gaaaatccct atgaatgcag tgaatgtggg aaagccttta ataggaaaga ccaqctcatt
                                                                      660
tcacatcagc gaactcatgc aggggaaaag ccttatgggt gcagtgaatg tgggaaagct
                                                                      720
tttagcagca agtcatacct aattatacac atgagaactc attcaggtga aaaaccatat
                                                                      780
gaatgtaatg aatgtgggaa agccttcatt tggaaatcac tactcattgt acatgagcga
                                                                      840
actcatgcag gggtcaaccc ttattaaatg cagtcaatgt gagaaatcct tcagtgggga
                                                                      900
aattacgcct tctttgttac accagagaat gcacacaaca gagaaaccat atgaatgcag
                                                                      960
tgagtgtgga aaagccttca ttaggaattc tcaactcatt gtacatcaaa gaactcattc
                                                                     1020
aggagagaaa ccctatgggt gcaatgaatg tgggaaaacc ttctctcaaa aatcaattct
                                                                     1080
cagtgcacat cagagaacac atacaggaga gaagccttgt aagtgcactg aatgtgggaa
                                                                     1140
agccttttgt tggaagtcac agctcattat gcatcagaga actcatgtag atgacaaaca
                                                                     1200
ttgataattt tacgaaactc tgaaaagtgg attcacaaga gatagaaaca atcatatata
                                                                     1260
aagagaaact ctgtaagtgg aatcatcttg tcatcttcca gaaaactcat actgaataga
                                                                     1320
aactttatga atgcacagca tatggaaagg catccacaga aagctgttct ttacatgcaa
                                                                     1380
aaagatagta gacaatacac aggaaaactg aatttagtaa ccactctgaa aatttttagc
                                                                     1440
agcaagtcat acctttttt aaaaaagttc atacaggtga ggaaccatgt taaacgttgt
                                                                     1500
aaagtcattt tactaacata agattcacaa agaggaaact tcatgaacca gatgaatata
                                                                     1560
gaatagactt ctttgaaatt catagtttac agaattttaa tgagagaaat tattgagcta
                                                                     1620
atgaatggca gaattaacaa aattacaaac attttatgta tcggaagcat ataccttgga
                                                                     1680
gggaccatgc tatgagggaa agtgtaaatc tagaaatgag aaacccctag ggaaaaaata
                                                                     1740
tatataggag tgaacatctt atgaatgtac caaataaacc acagctggac tgttaacctc
                                                                     1800
accttagaag cttcattcta aaaaaaaaa aa
                                                                     1832
```

```
<210> 3414
<211> 2072
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (268)...(1720)
<223> similar to gi4768275 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3414
tttagtgcag tatcctgaat ttagattcac acagagtttt aaatagtttt atttaaaaat 60
tggtggaggg aaacccataa tttgaataat ggagtctctt aaattcagtc tgaattggac 120
```

```
tgcttgcatt ggtctgtcag gtgataacta aatttccctt tcagttggtc ctgttgaaac
                                                                      180
ggaaccataa aatgactgtg atattactta tccaacataa gaaggaaatc agcattttat
                                                                      240
ttacatttta tccctgtttc aatacacaaa agcaactcca aagtgaattg tttgagattt
                                                                      300
aaggtttgct taactcttcc caaccctttg gcttttagat ttgcttggaa cggtagaaga
                                                                      360
aatccttcca agcctctcag aaaatatcag tgtttggggg atgaaagatt ctgttccaca
                                                                      420
aggtqtaatt tcactcaaag aaaaactgag cacctcacct gatqagcccg tgccacqcag
                                                                      480
ccaccatgtt gtctcactcc tcaagtctac ttgtctttac atttttacct ctggaacaac
                                                                      540
aggtctacca aaagcagctg tgattagtca gctgcaggtt ttaaggggtt ctgctgtcct
                                                                      600
gtgggctttt ggttgtactg ctcatgacat tgtttatata accettecte tgtatcatag
                                                                      660
ttcagcagct atcctgggaa tttctggatg tgttgagttg ggtgccactt gtgtgttaaa
                                                                      720
gaagaaattt tcagcaagcc agttttggag tgactgcaag aagtatgatg tgactgtgtt
                                                                      780
tcagtatatt ggagaacttt gtcgctacct ttgcaaacaa tctaagagag aaggagaaaa
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ggatcataag gtgcgtttgg caattggaaa tggcatacgg agtgatgtat ggagagaatt
                                                                      900
tttagacaga tttggaaata taaaggtgtg tgaactttat gcagctaccg aatcaagcat
                                                                      960
atctttcatg aactacactg ggagaattgg agcaattggg agaacaaatt tgttttacaa
                                                                     1020
acttetttee aettttgaet taataaagta tgaettteag aaagatgaac eeatgagaaa
                                                                     1080
tgagcagggt tggtgtattc atgtgaaaaa aggagaacct ggacttctca tttctcqaqt
                                                                     1140
gaatgcaaaa aatcccttct ttggctatgc tgggccttat aagcacacaa aagacaaatt
                                                                     1200
gctttgtgat gtttttaaga agggagatgt ttaccttaat actggagact taatagtcca
                                                                     1260
ggatcaggac aatttccttt atttttggga ccgtactgga gacactttca gatggaaagg
                                                                     1320
agaaaatgtc gcaaccactg aggttgctga tgttattgga atgttggatt tcatacggga
                                                                     1380
agcaaacgtc tatggtgtgg ctatatccag gttatgaagg aagagcagga atggcttcta
                                                                     1440
ttattttaaa accaaataca tctttagatt tgggaaaaag tttatgaaca agttgtaaca
                                                                     1500
tttctaccag cttatgcttg gtccacgatt tttaagaatt caggaaaaaa tggaagcaac
                                                                     1560
aggaacattc aaactattga agcatcagtt ggtggaagat ggatttaatc cactgaaaat
                                                                     1620
ttctgaacca ctttacttca tggataactt gaaaaagtct tatgttctac tgaccaggga
                                                                     1680
actttatgat caaataatgt taggggaaat aaaactttaa gatttttata tctagaactt
                                                                     1740
tcatatgctt tcttaggaag agtgagaggg gggtatatga ttctttatga aatggggaaa
                                                                     1800
gggagctaac attaattatg catgtactat atttccttaa tatgagagat aatttttaa
                                                                     1860
ttgcataaga attttaattt cttttaattg atataaacat tagttgatta ttcttttat
                                                                     1920
ctatttggag attcagtgca taactaagta ttttccttaa tactaaagat tttaaataat
                                                                     1980
aaatagtggc tagcggtttg gacaatcact aaaaatgtac tttctaataa gtaaaatttc
                                                                     2040
taattttgaa taaaagatta aattttactg aa
                                                                     2072
```

```
<210> 3415
<211> 2199
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2200)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(1485)
<223> similar to gi5732237 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3415
atgcgaggct tcgggccagg cttgacggcc aggcgtctcc tcccgctgcg gttgcccccg
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eggeegeeg ggeecegget ggegageggg caggeggeeg gegeectgga gegggeeatg
                                                                      120
gacgagetge tgegeegege ggtgeegeeg aegeeggeet aegagetgeg egagaagaea
                                                                      180
ccggcgcccg ccgagggtca gtgcgcggac ttcgtgagct tctacggtgg gctggccgag
                                                                      240
acggcccage gggccgaact gctgggccgc ctggcgcggg gcttcgqcqt ggaccacqqc
                                                                      300
caggtggcgg agcagagcgc cggcgtgctc catctgcgcc agcagcagcg ggagtcggcg
                                                                      360
gtgctgctgc aggccgaggt ccggctgcgc tacgcgctgg tgccgcgcta tcgcqqcctc
                                                                      420
ttccaccaca tcagcaagct ggacggcggc gtgcgcttcc tggtgcagct gcgggccgac
                                                                      480
ctgctggagg cgcaggccct caagctggtg gaggggccgg acgtccggga aatgaatggg
                                                                      540
gtgctgaaag gaatgctctc agaatggttt tcctccgggt tcctgaacct agaacgggtt
                                                                      600
acctggcatt caccgtgtga agtgcttcag aaaatcagtg aggctgaggc tgtgcatcct
                                                                      660
gtaaaaaact ggatggacat gaagcgccgc gtttgggccc tacaqaaggt gttacttctt
                                                                      720
ttctcactgt tcgacccctg gggagcccct ggtcgttttg cacgtggcac tgactggtga
                                                                      780
catctccagc aacatccagg caatcgtgaa ggaacatcct ccatcagaaa cagaagagaa
                                                                      840
gaacaaaatc actgctgcga tcttttattc catcagcttg acccagcagg gactccaagg
                                                                      900
ggtggagctg ggaacattcc tcaataaagc gagtcgtcaa ggagttgcaq agaqagtttc
                                                                      960
ctcaccttgg ggtgttttca agtctgtcac ctatacctgg tttcaccaaa tggcttctgg
                                                                     1020
ggcttctgaa ctcgcaaacg aaggagcatg ggaggaatga actctttaca gattcggaat
                                                                     1080
gtaaggaaat ctcggagatc acaggtggcc ccattaacga gaccctcaag ctcctcctca
                                                                     1140
gcagcagcga gtgggtgcag tcggagaagc tggtgcgggc gctgcagact ccgctgatga
                                                                     1200
ggctgtgcgc ctggtacctg tatggagaga aqcaccqcqq ctacqcqctq aaccccqtqq
                                                                     1260
ccaacttcca cctgcagaac ggggcggtgc tgtggcgcat caactggatg gcggatgtga
                                                                     1320
gcctcagagg catcaccggc tcctgcggcc tgatggccaa ctaccgctac ttcctggagg
                                                                     1380
agacgggccc caacagcacc tcctacctcg gctccaagat catcaaagcc tctgagcagg
                                                                     1440
tcctcagcct agtggcccag tttcaaaaga acagcaagct ctgacagtaa acctctccta
                                                                     1500
aagcacaggg ccccggctaa gaaaacgatc attttcagga ggggccggga gttatgtatc
                                                                     1560
tgaagcagct ttccaagcaa agccaaagtt gactgtgttc ttgtcccgca gccggtccac
                                                                     1620
actgtgaggc caggcctcaa cttccctcac cctgggcgtg acatgcaccc agtgcaagac
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ggttgtgggg tgcgggtgca cacaaatgag tgggttgctg tgctgtctcc ggaagattct
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gtcgttgccc ttggccctgg ctccctgccc ggggctggtg ctgtggtacc tacatcttca
                                                                     1800
ggaagctgtg cagcctctgc cattgccaat cccaggggga atctggcatc cttccttaag
                                                                     1860
gacccggggc gcgtgtgccc cagataagaa taggtgtacc ctttgtgctc ataaaacaag
                                                                     1920
aatgccggcg aatgggttgc ttttaaccng tttctcaccc ttgcaattgc agagggacaa
                                                                     1980
agggctgtgc ctacacttcc ccagttacat tctqaaqcct cataaatqta tqaqaaaggt
                                                                     2040
ttgtgaattt tgcacaaggt gtgtgtagta agttaaattg ttgaacacaa aaatgttgct
                                                                     2100
gcttgaggca taagttggat aataggcttt aaatgatcag ggattcaggt tcataatgaa
                                                                     2160
cttcacagta aagaacacgt ttqttctqta aaaaaaaaa
                                                                     2199
```

```
<210> 3416
<211> 6926
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(5403)
<223> similar to gi559330 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3416 cgccgagtcc gacttgcagc tggcccagat caaatgcaac ctgggccggg ccgtgcagct 60 ccaagagctg tggcccgggg gcctcttctg gaccaggaaa ctctccacat atattcgact 120 ttatgggaga aaatttagca aagaagatca tgttcttttt attaagttat tgtatgagct 180 ggtatcaatt ccaaaactgg aaatcagcat gatgcaggga tttgcccgcc ttttgatcaa 240 cttgttaaag aaaaaggaac ttctttcaag agctgatttg gagttaccct ggagaccact 300 ttatgacatg gtagaaagaa tattatattc caagacagag cacctaggat taaattggtt 360 tcctaattct gtagaaaata ttctcaaaac actcgtgaaa agctgccgac catattttcc 420 agcagatgcc accgctgaga tgctagaaga atggcgacct ttaatgtgcc cttttgatgt 480 aaccatgcaa aaggccatca cttattttga aatatttctt cctacctccc ttcctccaga 540 acttcatcat aaaggtttta aactttggtt tgatgaatta attggccttt gggtttcagt 600 gcaaaatctc ccacaatggg aggggcaact agtaaatctc tttgctcgat tggctacaga 660 taatataggg tacatagatt gggatccata tgtaccaaag atatttacaa gaattctgag 720 aagettgaae eteecagtgg gaageagtea agtgttagte eeaagatttt taacaaatge 780 gggaggatat aggacatgcc gtaatatgga tcaccgccat gatgggtgga ccaagtaagc 840 tagtgcaaaa acacttagct ggtttgttta acagcatcac atgtttttac catccttcaa 900 ataatgggcg ctggctgaac aagataatga aactacttca tcggttgcca aacagtgttg 960 ttagaagatt gcatccgtga aagatacaag aagccctctt ggataactcc tgtgcctgat 1020 agccacaage ttactgatea agatgttaca gaetttgtae catgeattat teageetgge 1080 ctcttggcta tttttaacaa aaaccggtag tgctagaagc aatccaggct ttgcagaatc 1140 ttgcactcat gagacctgaa ttggtaatac cccctgtact tgaaagaaca tatcctgcat 1200 tagagacatt aacagaacct caccagctca cagctacttt aagttgtgta attggagtag 1260 cccgcagttt ggtatcagga ggcagatggt ttcctgaagg tcctacacat atgctacctc 1320 tgttgatgag agcattgcct ggggtggatc caaatgactt tagtaaatgc atgatcacat 1380 tccagttcat agcaacattt tctactctgg tgcctttagt agattgttca tctgtactac 1440 aagaaagaaa tgacctcaca gaagtggaac gagaactttg ttcagccaca gctgaatttg 1500 aggatttcgt cttacagttt atggacagat gttttggact tatagaaagt agcacattgg 1560 agcaaacaag agaagagaca gaaactgaga aaatgacaca cttggagagt ttggtcgaat 1620 taggtctgtc ttctacgttt agtacaatcc tcacccaatg ttccaaagaa atatttatgg 1680 tggcccttca gaaggttttt aatttttcta cttcacatat atttgaaaca agagtagcag 1740 gtcgcatggt ggcagacatg tgccgcgctg ctgtaaagtg ctgcccagaa gaatctttqa 1800 agctctttgt tccccactgc tgcagtgtta taactcagct tacaatgaat gatgatgtat 1860 taaatgatga agagctagac aaggaattac tatggaatct tcaacttttg tctgagatta 1920 ctcgagtgga tggaaggaag ttgcttcttt atagggagca gcttgtaaag attctccaaa 1980 gaaccctaca tttaacctgt aagcagggtt acactctgtc ttgtaacctt ttgcatcatc 2040 ttctccgttc taccacactt atctacccta cagaatactg cagtgtgcca ggtggctttg 2100 acaagcctcc ttctgaatac tttcctatca aggactgggg caaacccggg gacttgtgga 2160 atctgggaat ccagtggcat gttccttctt cagaagaagt gtcttttgcc ttttatcttt 2220 tggactcctt tcttcagcct gagctcgtca aactccagca ttgtggggat ggaaaacttg 2280 aaatgtctag agatgatatt ctacagagtc tgactatagt gcacaactgt ttaattggct 2340 ctggaaacct cctacctccg ttgaaaggag agccagttac taacttagta ccaagtatgg 2400 tgtccttgga agagacaaag ttgtatactg gacttgaata tgatctgtct cgagagaacc 2460 accgagaagt aattgctaca gttataagga aacttcttaa ccacatactt gataattcag 2520 aagatgatac taagtcattg tttcttatta taaagattat tggagacctt ttacaattcc 2580 aaggatctca caagcatgaa tttgactccc gatggaaaag cttcaactta gtaaagaaat 2640 caatgaaaaa tcggctccat gggaaaaaac aacatatcag agcactgttg attgatagag 2700 taatgttaca gcatgagcta cggacactaa ctgttgaggg ttgtgaatac aaaaagatac 2760 atcaagatat gatcagagat cttcttcgtt tatctacaag ttcatacagt caggtgagaa 2820 ataaggctca gcaaacattt tttgctgcct tgggagcata taacttctgt tgcagagata 2880 tcattccctt ggttttggag ttcttaaggc ctgatagaca aggtgttaca cagcaacaat 2940 tcaagggtgc cttgtactgt ctccttggaa atcacagtgg tgtgtgcttg gcaaaccttc 3000 atgattggga ctgtattgta cagacgtggc cagcgattgt ttcttcaggg cttagccaag 3060 caatgtccct ggaaaagcca tcaatagtga gattgtttga tgatcttgca gaaaagattc 3120 ataggcagta tgaaacaatt ggcttggact tcacaattcc aaagtcatgt gttgaaatag 3180 cggaattact tcaacagtca aaaaacccct ctatcaacca catattgctt agcccagaaa 3240 aaattaagga aggaattaaa cgccaacaag aaaagaatgc cgatgcccta aggaactatg 3300 aaaatttggt agacaccttg ctagatggtg tggagcaaag aaacctgccc tggaaatttg 3360

```
aacatatagg cattgggctt ctgtctctac tgctgagaga tgaccgagtg ttgcctcttc
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gtgccatacg gttttttgtt gagaatctca accatgatgc aattgtagtt cgaaagatgg
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ctatctcagc tgttgctggt atccttaaac agctaaaaag aacccacaaa aagctgacca
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ttaacccctg tgaaatcagt ggatgcccta aacccaccca aattattgct ggtgataggc
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ctgataatca ttggttgcat tatgacagca aaactatacc aagaactaaa aaagaatggg
                                                                     3660
agtcaagttg ctttgtggaa aaaactcact ggggatacta cacctggcca aagaatatgg
                                                                     3720
ttgtttatgc tggtgtggaa gagcagccta agcttggcag aagcagggag gatatgacag
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aggcagaaca gattatattt gatcattttt ctgatcctaa atttgttgag cagttaatta
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cttttctatc attagaagac agaaaaggaa aagataagtt taatccacga cgtttttgcc
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tetttaaggg tatatteagg aattttgatg atgeetteet geeagttetg aageeeeatt
                                                                     3960
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ctggtttaat cagaggttct aagcactgga catttgaaaa ggtggagaag ctttgggagc
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ttctgtgccc tctgcttaga acagcactgt ccaatattac cgtagaaact tataatgact
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ggggagettg tatageaaca teetgtgaaa geagagatee eeggaaaett caetggettt
                                                                     4200
ttgaactgct gttggaatca ccattgagtg gtgaaggagg atcctttgta gatgcatgtc
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gactttatgt actacaaggt gggccttgcc cagcaagaat ggagagtgcc tgaactattg
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cacagactac tgaagtactt ggaacccaaa ctcacccagg tttacaaaaa tgtcagagaa
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agaataggaa gtgtgctgac ctacatattc atgatagatg tatctttgcc aaataccaca
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ccaaccatat cgcctcatgt ccctgagttt actgctcgaa ttctggagaa attgaaacct
                                                                     4500
ctcatggatg tggatgaaga aattcagaac catgttatgg aagaaaatgg aattggtgaa
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gaagatgagc gaactcaggg cattaaactc ttgaaaacca tattgaaatg gctgatggca
                                                                     4620
agtgcaggaa gatccttttc tacagcagtt acagaacaac ttcagcttct acctttqttt
                                                                     4680
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                                                                     4740
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caggtgctaa aacaaacagc aagaagcagt tcttggcatg cacgatacac agtactgacc
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aaagatatca ggtggctggt tataagtctt ttggaggacg aacaactgga ggttcgagaa
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atggctgcta ctaccttaag cggtctgcta cagtgtaact ttcttaccat ggacagtcct
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cctggttctg taggagatac cattccttct gcagagttgg tcaaacgcca tgctgggtg
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ctaggacttg gtgcatgtgt tctttctagt ccttacgatg ttcccacctg gatgccccag
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ctcctcatga atctcagtgc acatctaaat gatcctcagc ctattgagat gactgtaaaa
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aaaaccttat ccaatttccg aaggactcac catgacaact ggcaggaaca taaacagcaa
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ttcactgatg accaactgct tgttctcacc gatcttcttg tgtcaccatg ctattatgca
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tagaaagatg actagtcctc acttcaggct cttttcatca aaaattccac accctcaggt
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accatctgtg gtggctctct gcaagtttta aaactgcctc tgctgagctc tcatcatttt
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ggtggtttct gtgttagatc tcgttagtct gcattccaca gcttctcagt tgccatttga
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tgacaaagtc acaaagtctc agactagaaa taattaccca gtatgatcat ggcatccaag
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accagagtet cagaacteat taagaaacag tttacttgga atggagaata cecatetgta
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atacaggtcc tgtcatttca ttcatctcaa attattttga attcttccca aatggctgct
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ggatttaggt ggtaataggg gctgtgggcc ataaatctga agccttgaga accttgggtc
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tggattgctc gaccaagaca cagaagtgaa gtctgtgtct gtgcacttcc cacagactgg
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attgttgtgt gtattcaatg tgtgatttta aaaataaaca gcaacaacaa taaaaaccct
                                                                     6120
gactggctgt tttttccctg tattctttac aactattttt tgaccctctg aaaattatta
                                                                     6180
tacttcacct aaatggaaga ctgctgtgtt tgtggaaatt ttgtaatttt ttaatttatt
                                                                     6240
ttattctctc tcccttttta ttttgcctgc agaatcgttg agagactaat aaggcttaat
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atttaattga tttgtttaat atgttatata aatgtaaaag agtgtataaa ctgtagagat
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agcattggca agacattgta cagatgcaac cttttacaca acatcattgt gtaatttgta
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aagattcacg tgtagttctt tattatagtg attttgggct ttgtacccac tgaatgccat
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tttttgtgtt tttaaattat tttctttatc ttgttacaaa aactgagatg tggggttttt
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tttttttttta agttcactta tcattagaat gtctgaactt ttatgtaaca tttttggggg
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gcttttttaa aggctaacac cacatgtttg cccctatgac aagtttcata gagtgaaagg
                                                                     6660
tatcttctgg gttgaaataa ttcacaaatt ggtgaatgtc atcttgcaac acaccctgta
                                                                     6720
cagtetteet taaaggaaca etacagtata tttttagtat etacatgetg aatgaetgaa
                                                                     6780
```

```
tacagaccta agcacagcag tggtcctggt acagtattta agtgtcggca tacacaggcg 6840
taatccctgt ataaagtagt gccaaactga tttcagttgt gtaactagtt taaaacccaa 6900
taaatggatt ctttttaaaa aaaaaa 6926
```

```
<210> 3417
<211> 3786
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (3787)...(1585)
<223> similar to gi2460117 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3417 agtccgtgcg gtggaattcg tctggtggag atactggtcc accagagaat gggagagcgg 60 ctggagcagt gtccctggga agcgttgttt gtttttgaga tggagtctca ccctgttgcc 120 egggetggag tgeactgatg tgatetegge teactgeac etcegeetet caegtteaag 180 caattctcct gcctcagcct cctgagtagc tgggattagc tgttggggac acgagatgcg 240 ccaccacacc cagctaattt tgtgttttta gtagagacgg ggtttcacca agctggccag 300 gctggtctca aaatcctgac ctcaggtgat ccacccacct ctgcctccca aagtgttggg 360 attacaggcg tgagccaccg cgcctggcct ggaaacactt tcataccatg ttaatttctg 420 agactggggc tcaagttaaa tttaggttaa gggtttagga taagttagct aagatagccc 480 agaactttca taatatgaca gatctctaaa aataaatggc tcttttaagg cagcatgcca 540 tcaaaaaaaa gtacctctaa tgggattcta attatttagg ttaaactttt cctcatattt 600 tattttcaca tggaatccta aaaggttcgc cccgataagg cagaacatct taggttgtag 660 aaaattatac atggtatett taetgggaat attagetgtg ceaettatta getgtgaeet 720 taggcaaatt acttcactta tctggcctgt ttcttcggcg gtaataaaaa acaacagtac 780 ctatctccta cagtaggtgt gaggattaac tgggctaatg agaaatgctc agacacacag 840 900 tattttacca gcagtcacag gtttatctga gatgcaacaa ggcctgaaag ggtgagtcga 960 ctccactctc cagtgcctga aagtttcttt ttgtgctttt gacagagcac ttattttctt 1020 gatttgaaaa ggcaaaagcg actctgtttt tgtacttaat taggggtaaa tcacattcaa 1080 gtatcagact gaattaagtg atacaacttt ctcaaatgga tcactttaac ttcctcttca 1140 ttgaacaaga taaattttat taacactcat aaatttaaat attttggata ctagaccttt 1200 atcagttaga tgatttgcaa atatgttttc ccattctgta ggttgttttt ttcactttct 1260 tgaataatca taaatttagt ttttgacaaa atcttgcttt tatagaaatc tataccatta 1320 acttaagtag ctgtttttga aaaaataaat actgtttaaa tttagatata acagtattcc 1380 ttataaaaat ttattttatg gttttaaaaa atatttaaat tattgtataa acatttcttt 1440 aaaaatatgg tctgtagaaa gaaaagagta aaacctaagt tgtaaagtga cagtgatttt 1500 tgggttccat cattttattc acgtaatcgt gggaggatcc atctgattcc gtgggaagct 1560 gagggctaga ggctgccact gtcacactgc attctttctc atttcaccca agaagtcata 1620 ggtctgctct gaaaggtcaa aaggttcatg aactccgtct ggtgacagca gagcttggag 1680 ggcgccctgg ttttcttggt tttgcttaag gaagtcagtg ataactttcc accgtgcagt 1740 ctcagtctct tcttctgccc acctgaatgg gggtaggcgt gtgggagtgg aagaagtggg 1800 agcacgcagc caatggtaaa ccaggagaaa acgtgggact ttcaggaact cttttggctc 1860 tcttctctga tctttttaat gtggctttct tgtccagccc acgaactcct gagagcatcc 1920 atcacatcag gctgctccaa gagcatgggg aaggtggcca gcatgggatg gctaattaaa 1980 tcagtacttt gcaagctcat cctgtctttc aggagcacat ctccaagaat ttgtcgataa 2040

```
aatatcaaca agtgaataga acacatattt ccaattaatg tttctggcag tagacttagt
                                                                     2100
acatttcttg atcttctgtt caaggatctc agtttcacta gaagttgagg ctgccttctc
                                                                     2160
attgtcataa tctggtagaa aacactgccg tgtgctcttc tggatattga agggtccact
                                                                     2220
tcaatacctt tttcataagg agtaccacca ttcaagaaaa gctcataagt ttttgctgga
                                                                     2280
ataggaactc cactggcatc aaaaagttta agaaacaccc agccacagct taactctcct
                                                                     2340
ctttcaccag ttgaattgcg aatataagaa attccaagtt caaataatat tccaagatct
                                                                     2400
ggagatgcag aattagacct gataaagcaa tcaccatcaa gcaaacatgg taagatgcga
                                                                     2460
gtaacctggg gagaaaaggt ccatgttttg ggctttttag gttqccatqt qqctctqact
                                                                     2520
gtatgaatgt tgctcagaac cttattacca tcaaatagac agaggcgtac atgtctgctg
                                                                     2580
agaacctgta tgctcattcc tggaagagga atcattttac agctccataa tgtcagaatc
                                                                     2640
aatgaaatac gacttggtct cgacctaata gtgccttctg tagcatccca catcagatct
                                                                     2700
ctgaaggcca gttgtgaagg catgagctct ggttgtaaga agtaatttgc tcgaaattga
                                                                     2760
ttcccttcct ccagaagctg tqagagcgtg gaaggcctga accctgcagg aatagctccc
                                                                     2820
atcgtagtta acacatcaac agtgtttatc tgttggagca caggcttaga aaccagaaat
                                                                     2880
atacgtcctc tgctctgtac attccatgcc ctgaaccctg tttcagatcc attggtqtct
                                                                     2940
tccacagtct ccatcctatt tcgcatcaga actattaggt agcaaaacga gacatgatta
                                                                     3000
acaagacaga agatgcccgc ctctgaaatc gctttctgaa cagcactcca gtggggatca
                                                                     3060
gttctttggc ttaacttctg ctccatctgc tgtttcatcc accgcctcta catcttcttc
                                                                     3120
actgccctct tcacttgatt cttggccttc ttcttcttca ctataaggct ctaggtaggt
                                                                     3180
tctgggaaca agaccttcat ttcctttggc atccttagct atccaccaac catcaggttt
                                                                     3240
tttttcaatt acaaggagaa tttccccttt cttaaatgta agatctccaa cttgctgagc
                                                                     3300
agtaaaatct ccaacagcga tgtattcttc accggttgac catttgtgag attcattttc
                                                                     3360
ctctttctct tcctcttcct cctctgcatc ttcttcctcc ccaccactqt cttcactatc
                                                                     3420
ttcactttca cttcttcct cttcttcagt aggtgcccca acttcagtta tattttctct
                                                                     3480
gettattgte acageaagge cetgeagttg ttgggtaage ttgteeaaaa qaqtatqete
                                                                     3540
ctcttctttt ctctgattat agtttgcaac aggtgcagat tcatcagctt tgcttaattt
                                                                     3600
ttgaagagca tttttatttt catctattgc ctgctttaac tggatacatc tttgataaat
                                                                     3660
atgttgtctt ttattgggtt ctagagcttc tttcagttgg ctctcagaaa gcaaactatc
                                                                     3720
aacctgttgc ttcagctcct gattgcggcg ccgcagggcc tggagaggat ctcgctgtcg
                                                                     3780
tctcgc
                                                                     3786
     <210> 3418
     <211> 2783
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (6)...(1436)
     <223> similar to gi1503988 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
```

```
<400> 3418
atctcagagt ggcggaattc gccgggacca gccgctcggg gccgggctga tacagccgct 60
tcaccgtgcc cctgcccgcg accatggcct cctccgaggt ggcgcggcac ctgctcttc 120
agtctcacat ggcaacgaaa acaacttgta tgtcttcaca aggatcagat gatgaacaga 180
taaaaaagaga aaacattcgt tcgttgacta tgtctggcca tgttggtttt gagagtttgc 240
ctgatcagct ggtgaacaga tccattcagc aagggttctg ctttaatatt ctctgtgtgg 300
gggaaactgg aattggaaaa tcaacactga ttgacacatt gtttaatact aattttgaag 360
actatgaatc ctcacatttt tgcccaaatg ttaaacttaa agctcagaca tatgaactcc 420
```

```
aggaaagtaa tgttcaattg aaattgacca ttgtgaatac agtgggattt ggtgaccaaa
                                                                      480
taaataaaga agagagctac caaccaatag ttgactacat agatgctcag tttgaggcct
                                                                      540
atctccaaga agaactgaag attaagcgtt ctctctttac ctaccatgat tctcgcatcc
                                                                      600
atgtgtgtct ctactttatt tcaccgacag gccactctct gaagacactt gatctcttaa
                                                                      660
ccatgaagaa ccttgacagc aaggtttaca ttataccagt gattgccaaa gcagatacgg
                                                                      720
tttctaaaac tgaattacag aagtttaaga tcaagctcat gagtgaattg gtcagcaatg
                                                                      780
gcgtccagat ataccagttc ccaacggatg atgacactat tgctaaggtc aacgctgcaa
                                                                      840
tgaatggaca gttgccgttt gctgttgtgg gaagtatgga tgaggtaaaa gtcggaaaca
                                                                      900
agatggtcaa agctcgccag tacccttggg gtgttgtaca agtggaaaat gaaaaccact
                                                                      960
gtgactttgt aaagctgcgg gaaatgctca tttgtacaaa tatggaggac ctgcgagagc
                                                                     1020
agacccatac caggcactat gagctttaca ggcgctgcaa actggaggaa atgggcttta
                                                                     1080
cagatgtggg cccagaaaac aagccagtca gtgttcaaga gacctatgaa gccaaaagac
                                                                     1140
atgagttcca tggtgaacgt cagaggaagg aagaagaaat gaaacagatg tttgtgcagc
                                                                     1200
gagtaaagga gaaagaagcc atattgaaag aagctgagag agagctacag gccaaatttg
                                                                     1260
agcaccttaa gagacttcac caagaagaga gaatgaagct tgaagaaaag agaagacttt
                                                                     1320
tggaagaaga aataattgct ttctctaaaa agaaagctac ctccgagata tttcacagcc
                                                                     1380
agtcctttct ggcaacaggc agcaacctga ggaaggacaa ggaccgtaag aactcccaat
                                                                     1440
tttttgtaaa acagaaggtt ccagagcaca qaaggtcatc atcacaagca aactttatta
                                                                     1500
aaaaaaaact agaagtgtgc tttgattttg ctgttatttg ttttatcact tctatatttg
                                                                     1560
gtgaacagcc acagttactg atatttatgg aaaagtactt tcaagtacaa ggtcaataca
                                                                     1620
taagccagag tgaatgatac tacaagttga gcatctctaa ttcaaaaatc tgaaatccag
                                                                     1680
aagcttcaaa atctgaatct ttttgagcac tgacttgacc ccacaagtgg aaaattcccc
                                                                     1740
acccgacacc tttgctttct gatggttcag tttaaacaga ttttgtttct tgcacaaaat
                                                                     1800
ttttgtataa attactttca ggctatatgt ataaggtgga tgtgaaacat gaattatgta
                                                                     1860
attagagtcg ggtcccgttg tgtatatgca gatattccaa acctgaaatc caaaacactt
                                                                     1920
ctggtcccta gcattttgga taagggatac tcagcttgta cctatatatt catatatt
                                                                     1980
cactgttgtt agaaatgttt aagttgctgt tctgtgatga atctaaatct tttctcttgc
                                                                     2040
taccaagcta ttgtcactgc agtgcattat accaaagagc gaagtcagtg ccactgaaaa
                                                                     2100
tacagaaccc attaatatcg tggctatctg attacattta tattccaaga tgaacctttt
                                                                     2160
ttatatatgc taaaaatttt ggggaatatg ttttgggatg tattatggag ctaaaactct
                                                                     2220
aacctcttaa tagttttata gaacttaaaa attttttata caattaccca attggtgata
                                                                     2280
tgatcttaag cttttgtgtc agattattta atatgatgac ttcatgcttt attatgcctt
                                                                     2340
attatggctg acgtattact gtggtgaaac aaaatatctt taaaagttaa aacatccaqa
                                                                     2400
tatataagct atttttcct aaggataaag tacctttgag catgagtgta tcacagcttt
                                                                     2460
cattaggaaa acttttcatt acatacttgt ttaaactctg tcttccaggg taaaaataat
                                                                     2520
aaggttgaat cattttatta aaaatacttt ttaagaaaat aactatgaac atctgaatat
                                                                     2580
taaagatata aaaatgcaca taattcatat ttcaggtggt atttgcattc agtgccttac
                                                                     2640
tggtattctc agaacatttt aatgatttct aacatttctt aacagtcata gatatataca
                                                                     2700
ttttcatttt ttgtacttga atattctaaa taaaactgac atttactctt gacaaataaa
                                                                     2760
acatatattt actaaaaaaa aaa
                                                                     2783
```

```
<210> 3419

<211> 838

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(839)

<223> n = a,t,c or g

<220>

<221> misc feature
```

<210> 3420

```
<222> (40)...(465)
<223> similar to gi780367 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3419
cacctcaagc cagctgggct gtgggcggca cctgtgctct gcaggccagg cagcgataga
                                                                       60
agcetttgte tgtgeetaet eeceeagagg caactgggag gteaacggga agacaategt
                                                                      120
cccctataag aagggtgcct ggtgttcgct ctgcacagcc agtgtctcag gctgcttcaa
                                                                      180
agcctgggac catgcagggg ggctctgtga ggtccccagg aatccttgtc gcatgagctg
                                                                      240
ccagaaccat ggacgtctca acatcagcac ctgccactgc cactgtcccc ctggctacac
                                                                      300
gggcagatac tgccaagtga ggtgcagcct gcagtgtgtg cacggccggt tccgggagga
                                                                      360
ggagtgctcg tgcgtctgtg acatcggcta cgggggagcc cagtgtgcca ccaaggtgca
                                                                      420
ttttcccttc cacacctgtg acctgaggat cgacggagac tgcttcatgg tgtcttcaqa
                                                                      480
ggcagacacc tattacagag ccaggatgaa atgtcagggt ggggttacag aggaaaggcg
                                                                      540
gggtgctggc ccagatcaag agccagaaag tgcaggacat cctcgccttc tatctgggcc
                                                                      600
gcctggagac caccaacgag gtgattgaca gtgacttcga gaccaggaac ttctggatcg
                                                                      660
gtgagtgccc agctgattgg gggtatggcg agtaaggggt tgtgatgccc caccctgctg
                                                                     720
caggaaccet gggccatggc ggctgccage agatggcaag ggtgtgttga gggcctggag
                                                                     780
eccagagegg ngccagetge teaccecett teeeggngag ggeccaggta gggageae
                                                                     838
```

```
<211> 1345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1348)...(216)
<223> similar to gi3283350 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3420
ttttttttt ttcatcttat gacatattag tttattacat gcataaaact ataaatgata
                                                                       60
aaaatgaaaa atgtaatgaa cagtttatgt ttttttaaaa caaagtcaga ttttaaaagt
                                                                      120
tgtccacaga gagcaaaaat cactttacgt actcatgatg ggctttaata tttctttaca
                                                                      180
ctatacatac tgaaaatgtt tacatttact aataaggaat gcccaagcgt atccatcacc
                                                                     240
atttgaatag cttgcagggg atttgtgatt tcttccatgt tatctcttct caaaacccaa
                                                                      300
tctggcttaa gtcttgaaac tattctggtc cttacaggtg tttctgggat aaaaggaatg
                                                                     360
cttatagaag aattettett ttgettgtaa agtattettt cagtatteat tttatgttta
                                                                      420
tgagctgtaa gtttgtagag actgtaaata cggtcaacaa ctttggacct acttcgtaca
                                                                      480
tcagaggctc tatttgttgt cttcagtaaa atagccaaca aacaacaagt ttttgtaaaa
                                                                     540
atgetteege etttgtetge aactttatta eeaggetttt eteggtatat etgeaaaage
                                                                     600
tccaatagta tatctataca attttctaca tcataaactg ctgaagtagt tttctcatac
                                                                     660
ttagatacat taagcaagac ttgcacagca tatctgatga cttccataca aggaatactg
                                                                     720
cgattacaac ttcggatcaa aacaaatatt ttagaaattg ctccactctg ggccatgttc
                                                                     780
tcacaacaaa gtggagacaa tctagtaact acctctaggt gttttaaggc ctcaagaatg
                                                                     840
gcagaaaggt gcttatatgt caaaaggtaa tgaagtgcaa gtgcagttct tttgtagagt
                                                                     900
```

aaaaaaaaa

<210> 3421 <211> 790

```
ttgttttctt ctcgaatctc cctattaaca acttgaagac ttagtcgtat agctttaatt
                                                                      960
tttgtacaat catttttctt cctccaagaa tagcctctcc ataatgcctg aattttaatg
                                                                     1020
attccactag tgaatttttc ctgcttttta cggaggagaa aatggcgcac tgctttctgt
                                                                     1080
attactgatg cagccctatt tcgctggctc agacattctt gaccttcatg ctcaatcttt
                                                                     1140
ttgatgctat gatatttctg aataaatctc ttttcttgta atcttgctcg aaaccatctc
                                                                     1200
tgaatacaga tgactgaatt aacctgcttg ttagcattct tcacagccag gtaaagttta
                                                                    1260
taggctcttt gaattctaac agcattcagg tgataatatg cagctgcagt gaagtgaaga
                                                                    1320
agtcgaattt tggctctctg ttcta
                                                                    1345
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (98)...(449)
     <223> similar to gi3875371 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3421
cgactacaga aacgctatgt attagaggaa gctgagcaac tggagcctcg agttaatgct
                                                                       60
ctggaagagg acatggatga tgtggagtcc agtgaagagg aagaagagga ggatgagaag
                                                                      120
ttggaaagag tgccatcacc tgatcaccgc cggagaagct accgagactt ggacaagccc
                                                                      180
cgtcgctctc ccacactgcg ctacaggagg agtaggagcc ggtctcccag aaggcggagt
                                                                      240
cgatctccca aaaggagaag cccctccct cgccgagaaa ggcatcggag caagagtcca
                                                                      300
agacgtcacc gcagcaggtc ccgagatcgg cggcacagat cccgttccaa gtccccaqgt
                                                                      360
catcaccgta gtcacagaca caggagccac tcaaagtctc ccgaaaggtc taagaagagc
                                                                      420
cacaagaaga gccggagagg gaatgagtaa tggactcagt ttggttttag tccacatqgc
                                                                      480
ctcctgtgga tataaggata tctgtatgtg gaaggattaa gatctccccc aggcagctat
                                                                      540
aagaatattt tagtttttt cttatcaagt ttctcaacct ttatttttaa tgaaggaggt
                                                                      600
gctgagtttt gtatcttttt aatcataatc aacatcagtt tttgacccaa ctaaccttga
                                                                      660
ctgtattcaa acttatgaga gtataaagga tctggaggtt ggggatatga ctgacaagga
                                                                      720
aaggctgtgg ccacctgatg accetttece tttttattaa accggacaca cctgtttece
                                                                      780
```

790

```
<210> 3422
<211> 6730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(5954)
<223> similar to gi3327062 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3422
gaaacatgtc attaagtttc ttaaatgacg aagaggccag gaagatcctt caggtgctgg
                                                                       60
aaaggaatga ggagttacag agggccgaga aggacaggat cagcaaactt cagaagacaa
                                                                      120
agagggatat cagatggctt cagggagtga ctggtgaatg gtttgaagaa attcaaagaa
                                                                      180
aaaagttttg caatgaaaca gatgttagcc aaatgttaaa acaaccactt acatacaggc
                                                                      240
taagtaagga gatggcaaaa aatgatccga tagaattacc tacatcaaga tctaaaaatq
                                                                      300
taactaatca aaaaaagccg acaccttttt cttcccggat gagcttcaga tcgtcatttg
                                                                      360
cttccctgtt ctcattcagg aaatctggaa aggagacttc aaagcttcca tcactgggac
                                                                      420
agaaaggatg tgatggccat gcaggacctc ctatgcctgt gaggggagct gctgtgcagg
                                                                      480
caaaaatata caattcacct ctggaaaatc atctagttga cagtacattt gtcccaaagc
                                                                      540
cagcagtcat gagggaggag agtggcatgc ctccaccgtg ggatgcttca ctgctggaga
                                                                      600
atgagttttt ccaagtttta gatgacttgg atagcaaatt ggctcaggaa cagtctgcaa
                                                                      660
gctcagtgaa taccagaaca cccctcaact atggatcaag aacacagttc ggtcactttt
                                                                      720
attccagtgg taacagacat ggtaatatca cagaaaggca caaaaaacac tataatgaaa
                                                                      780
cttccaatat gtctatctat gacatcctaa gaccaggaac tcctagggaa ggttttaaaa
                                                                      840
ccttttctcc taggacaagc acaatttatg atatgtatag gacaagggag cccagagtct
                                                                      900
ttaaagaaga ttatgtgcaa aagaatactt ttggcagtac ttcgctgtgt tttgacagca
                                                                      960
ggcaacggtc ggccttacca gccacagggc atttcacagc aagaagctta cattttccag
                                                                     1020
ccacaactca gagcaagagt gggtttatac caccaaggca ccagcagagt ccaaagagaa
                                                                     1080
ctcctttatc atccatcata tggaacagat cagattcctc tagagacagg gagaaccagg
                                                                     1140
aagagtteet gagggeacea teaceaatgg aaattgatee egetgaeaag tatgtgtate
                                                                     1200
ccaggggttt tcaggagaat aagagatatg aatcgtacca ttcacagaat gtttaccaac
                                                                     1260
gtgttagttt aaatgctccc atggagaatg caatgagtcc cgacactttt gagaactcag
                                                                     1320
agaacatgcc attctaccat caaagcaaca catttaccag atctttcttc agcaatacct
                                                                     1380
ttggacgaag cggagaacag aggagatttg gacaaggtcc tttttggggc caagagaaag
                                                                     1440
gacattettt etggtetgae ttteategaa geaggaaate atteagttet tetgaeagag
                                                                     1500
actttgaaat gatttccatg gaagcaaata gtgtatcagc cattcatggc cataatgttt
                                                                     1560
cttctgaaca ctgggaatca ttttcttctg gttatggaac agatgtttcc agaggccaag
                                                                     1620
aagagccaca tccttggcag tttgattttc agagatccac actggatagc atggtggtat
                                                                     1680
cacatggtaa tgagacccag ttgactcctc attttggcac accaaatgtt tgctccatga
                                                                     1740
ctggttcaag ctatcacgtc aaatctagtg agttggtaag tcaacaggac agttctcctg
                                                                     1800
tagaagtaca tataaacaaa gaagcttcct catttggaat tgctcagact ctagcatcct
                                                                     1860
cattcaaaac ttccttttcc cagatttctg atgacagaag gaatcctcag agtcccaact
                                                                     1920
tgcagaatcc cacagtcact ttgcagaaaa tttttccaaa taagcctgcc tctcatccaa
                                                                     1980
tgagaagcca tacagaagtc actgtgacca acagcaattc agttgactct ctgcctcttg
                                                                     2040
ccaaaagcca gcccaatatc ttggtcacag aagtaaataa tgagaaagac ttaaatgaat
                                                                     2100
ctatttcaga agaagacaaa cagctaagca agatggacca gacaaacaag gcaggtgaaa
                                                                     2160
taccccaacc tgtttcacag acagggatct caaactcttt acctgatttt caaaatccct
                                                                     2220
tatcccagga ctcagccaag agcaacgggt ttggttttaa tgcatctacc ataataagtt
                                                                     2280
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                                                                     2340
cagataaatc caatgacatt aaacaagata agaggtttac tgaaaacaga aaacttggct
                                                                     2400
caacagette cetteettte atteaggaae acagaacaee accatettte eccaggaeag
                                                                     2460
accaaggttg tcaccaggaa ttaactgtaa ataatgaaga tatttcaaga attattacaa
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caagcagttt teteatacat ggeaggeagt caggaagtaa aataatgget getteattga
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```

ggaatgggcc acctcccttc caaatcaaaa ataatgtgga agatgcaatg gggaactata 3180 tgttaaacaa atttagtccc agttctcctg agtcagcgaa tgaatgttcc aaagtccttt 3240 cagactcagc cctggaagca cctgaagcca cagagagaat gacaaatgta aaaagcagtg 3300 3360 cctcagggga gccacatgcc tcaactggaa gagaaggaag aaaaaagcca ttgacctcag 3420 gcatggatgc ttctgagcta acaccaaggg cttgggagag aatcattagc cctgtggaaa 3480 gtgactcatc tgttagagat tgttctttaa ccaaaagaca acaccaaaag gaaaacttcc 3540 aagaatacac tgagaaagag ggtaaaatgg ctgcctccag gagaagtgta tttgctcttt 3600 caaatgaaga ccctttacct ttttgctcag acttgtcagg aaaagaacgt gggaaaacat 3660 tacataaagt taagacgact agtacgtttt ctgtttctgg tgatgaagat aatgtaaaat 3720 gtctggaggt ggtctcaata tattacactc taccgaggaa acccagcaaa aaattctgta 3780 acctccttca acagtataca caaaatacta atttacttat agaatcacct caagtggaga 3840 ctgaaacatt tcctaacgct ttagaaaaag acaaacagaa ttattctaca cgagagcagt 3900 caggaacacc ttcatgtgaa aatctaaaga tgtccgtcaa ctctgatcag acgctcacca 3960 ctgaaaatat gactgccttc cgattatcaa atagggggcc cctagctcct acattacagg 4020 aaatggcttc tgttgaggca gctgtttctc ttcctgaaga ggaatctaaa gctagagaga 4080 ttttttcaga taatttagct aaaacacctc taggtgattc agaaaacaag aaggaaagag 4140 gcaaaaagtt gcaaagtgaa accctgcata cttcattgat gcttcagaga aaaaatgtat 4200 ccgaagaaaa atctgaaaat tgtcaacaat ccattaattc aagtaacagt ggtccctcta 4260 gtcttccagc tctttcagaa gttaatattg gaaattccca aactagaaga agttcttggg 4320 agtgtacagg gagtggtaga gccattccat ttactggaag tggcaagtgt ccccagaaag 4380 atcacacatc cacagctgta ggtgatggct ccagtggatc acagcctagg gaaggcagag 4440 gggacattgg aaccaactgc caaaaaatga ctaataaaac actttctcac tcagagagtc 4500 aagtetttge eettaeteea geattgeata aactaeaget tggtgaggag aeteagteag 4560 atgaaccaaa cttagagagt ctgcagtctg aaccaagaga attacctcaa agaagtcagg 4620 aggcaaatat gacagagagc aggaaggctg aagatgaaat gcagaagtca gcttgggatc 4680 aaccttcact tcctgaagga aacaaaaata aaaccaactt ggatgaccta gtaaaggggg 4740 aaaatagatc ttcagttaaa cacagattgg cagccatgtc taaagccagc agaaaattcc 4800 cagctaaaga tgtaagcccc agaagacatg tagctactat cttcccccaa agtggaagca 4860 gatctggctt tgaccattta tctcttggca cagtggagtg caacccactg ttccctgagc 4920 ctactccaaa atctgcagag tccattggcg aaagcaggtt gagtgagaac ggaaagcatg 4980 tgaagaaatc cgagaacctt ctccccatta ctgtactacc caacagagaa ccttctacac 5040 acgtcagcaa ccagaagtct aacagcattt cacaacgaca tcagaatgag tttaaaaacg 5100 tctcagaatc accatcaaag catgagaatt ctaaagacgt cacagcagct cagaatttag 5160 taagagaatc aggagcccca tcacccatca cattcaccag cctcagggaa gcagaattct 5220 ctgacaatca gaggaggctg agccctcctt ttccactgga gcctgcacag aaatctagag 5280 taagcagtcc actggcgcag ttttctgcag caacaaagga gtgcttcatc tctggagtgg 5340 gaacctgagc cacacctcta tcgttcaaag agtttaaaaa gcattaatgt tcatggcgat 5400 ctactacgaa aaagccatcc tccaaaagtc agggagcgcc atttttctga aagcacttct 5460 attgacaatg ccctgagtcg actgaccctt gggaatgaat tctctgtcaa caatgggtac 5520 agtcgaagat tcagatcttt ttctgaactc ccctcctgtg atggaaatga aagttgggct 5580 tatcgcagcg ggacaaaaac aggtcccagg tctgcaatat ctatatacag acctatcgac 5640 tatgggatct ttgggaaaga acaacagtta gctttcttag aaaatgtaaa gaggtcactt 5700 acacaaggaa gattatggaa accaagtttt cttaagaacc ctggcttcct aaaagatgat 5760 ttgaggaacc ctcccaaccc ctcagagtca ttaagctcaa attctcccag tagtcaggtg 5820 ccagaagatg gcttatctcc aagtgaaccg cttaatatct atgaggatga cccagtggac 5880 tcagattgtg acacagacac aaccacagat gatgaatact acctggatga aaatgacaaa 5940 gagtcagaac tgtgaggctt tttcaataaa atgctttact tttttcacca aaagcttata 6000 atggaactaa ggtgtacatg tgcatgtgca tggaaggata aaagatctag tctgggcagt 6060 gtctgctctg aaatgtccca catctccttt tttttcctcc acaccctata tagacacttc 6120 ctgaatgcta gaacaatgaa ttcttgtttt gagagagtct ctgctatttt ctatctctgt 6180 aaatgttett ageetgeett teeaceacte ceaettaate eetgatteae tgtetgaett 6240 gggctttctg ctttacttcc ctcctaacat ttttcatctt taattgtgat ttacaaccct 6300 aatatcccag gcacatacaa aacttatgaa ttacccagca caactgtgaa actctgtatt 6360 gcttcttccg gtccacaccc tatactcatg acattaaata aaaggtaggg atgataacag 6420 tggggtaaat attatcatcc tgtttgactc atgaacattt aggaagttta aggtggtgat 6480 cttctctttc aaacaaagat aaaggaattt attttttaac ctgagaaact gattgcaaaa 6540

```
aggaaaaaa aaagataaag gaattttgta agtacttcct gttatatccg taggggagcc 6600 tggggaggcac atggtcaaag cacatgttga ggttatagat taggacctga atccctagta 6660 agccaataga aggttagcag tcctagaaat tcctctgaaa ccgtggggga ctggctggat 6720 tattaagggc 6730
```

```
<210> 3423
<211> 1902
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1762)...(764)
<223> similar to gi854326 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3423 ttttttttt taagccttat atttttaata aaaaataaac agtctctgac aagcagtttt 60 ctgaatccca aaacaaagga aaagggaggg ggagaggtga aggggtcagc tagggtaaag 120 gagtgaagaa ggctcagatt acccctgcca ttctgccagg gcagaaggga tcagagtctg 180 ccccaactga agcaagaaga aaggtggtca gacttcagga aagacttcct gggagtcagc 240 cggtgcacga ctggtaaggg aagcaggagg gagcagatcc ctgcatgacc ctgggagaag 300 ggagtgttgg tgtccaaagc ggcagcttca gagtggagtt tccaggagtg gcatgttagc 360 atatgattgt ttagatgttt ggtgttcatt accatagggt cctgggacag gcaggttttt 420 tagggtctct tgaaacactg tgtttctgga gggtccctgg aatggccaga actgaaggat 480 cctctccagg ttcttcaata tcagtgtagg agcaggtctg ggggtagccc ccccctgtt 540 agagagctca tgtgcttggt agaagggagt cccatagggg aggcagactg ctgtgcatca 600 ccctgctgag tgtcatcagt gatgcagagt agcagaagct cctctcaggg gagaaaggtg 660 gtcttttgtg ctgctgtcat cctagtcagg gctgtgcttg ggcccgcccc agccagcatg 720 gcccaggtgc ctgcaccgca gccccggcct gtgcctagag tttaagctac ctcagtgcct 780 aggcagttgt tgtcagcgtc cacatcactg gcagaggtcc tgcattcctt gggagactgg 840 aggtgttgct ctctgcttaa cggggccttc tccccagggc gcagggtctc acagccctga 900 accttgcccc gagcccggag tgctctcaat ggggaggcca cgaggatgat gagggctcct 960 gaaagcacta aggcaaagag gacagtgaca gtgacaaagt ggggccagta ggactgctgg 1020 gcagccaggg cggccccacc actgaccctg gtcaacggga ccttcacatg ctcccggggg 1080 atgeetgeea gtteaggate eagggeeagg gtetggteet ggetgteeae eeagtaggag 1140 atcacagggt atgaaaagcc attctcagtt gcccagcact ggtagagacc cccaactcca 1200 tcctgcacta tcagcaagag ggagccattg tagacagtgg aagaggcttc tgggactgct 1260 gctgggccat gactccaata ataagaggcc aaggctgaca ggtgggggca ggggagctcc 1320 aggatggagt tagggacagc caggacttct ttaatgattt gcgggcggct ctgaggccga 1380 aggeteetge teatggggee actggeacat geceaetetg ggtteeceeg etceatgtee 1440 tgcttccagg agttcaggtt gggggcagac aggaggcaac aggttcggga ctcagggtcc 1500 caggcacagt gggggtcccg ggcaaggaca cagtccacac agctctcata gacactacag 1560 ttggctcggg gcaccctcca gacacctcct gagaagccta caaacactgc accctgggtg 1620 ggggccagct gcaggttgcg aacaggttca gggtcaggga acagctgaat ctcttccacc 1680 agatgagcac tgctgtcccc acttaccaca gccttgtgga gcgacccctg tggtgattcc 1740 caggtacatg acaagatggc tgcggacgcg tgggcggacg cgtgggtcga ccgggattcc 1800 gggaggacta cacgtcaagg tggctcttga gattctagta ctagatgcga taagtagatt 1860 agtgcgaagt agtaatacca ataatcatac ataaaccgcg at 1902

```
<210> 3424

<211> 2416

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2410)...(454)

<223> similar to gi4755188 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
ggtgccctcc cccactgatc tggaatgatc tacactgcta gtgaagagga gggatggcaa
                                                                      180
gctgactaaa taagaaggca gggaaagaaa gtccgcttta gttctgaggg ctgtgacatt
                                                                      240
agatgagagt ggagccctgg gcatgtcagc cagccttctg tgtaacgccc gcccaggtcc
                                                                      300
cattgtgtct gttctcttgg tcctccactg ttgcccacat cttcctccag gctgcttaag
                                                                      360
tgcccctcct ggagtgcatg agtaggtcgc gttgcagccc agcctccagg ctggaggtca
                                                                      420
gtctggctgt gggagggtcg gtcagcagag tcaatttgtt gaaaacacct ctgccaaagt
                                                                      480
agtcagcaat cacagaaaag ctgtcattgg agcacttgag ctgatgctgg aattgatcat
                                                                      540
ggagateteg tttetgttee tgggeeegga teatateeat gaeetteegg tttteaggga
                                                                      600
ggcaggtggg gcagtcagca tcactttccg agtaactctc aaagcagtgt tggtggaagg
                                                                      660
agtggccaca caggaagtgg actgagggca actccaaggc actgttacag atgctgcact
                                                                      720
tggtcttttg gaaaatctta ggactggcct tgagctcttg gatctcctgg cggatacggg
                                                                      780
tggtctcctc tcggtaccgc cgcacccgca gctcatcctg tgcaatctgc tggctctgtt
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tctgtagttt ttggaccagg tagtccctga tgacggagag tgtggctgtg gagttgtggg
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ccagggtctg caccactaga agaggtggca tgaggttctt gttctcgata tgcttgagga
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cagetgeeae atacteettg cagteeteet cettgegage gaagtagetg agggeetget
                                                                     1020
cccacaagga ggggtcctgc tccccatggc gctcacacac gctgatgacc tgccggtact
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gctcgtgctg catgtggtag tgcatgatct gctggaacag cttcccctgc tcataaaggt
                                                                     1140
aaaggacacc atcctggaag tcgtgcatct ggcacaggac cagggccttg tcaaagacgt
                                                                     1200
egeagaageg accaetette ageagggaaa tggeetetge gtgaagette tetttgaeet
                                                                     1260
gtggateett etegtgggee cagttetgea gtegeagete aaggagtgtg tegtagatee
                                                                     1320
cetggggtga gtetggetge aetteaetea tgtgetetag gaaggettte agetetegeg
                                                                     1380
ggttattggc aaagatgggg atgaactcct cagagttggc cctgcaagcc tggggcctcc
                                                                     1440
ctatcgctgc ggccttcgag gctgggccga taatcagtac aaagtccctt cagcaactga
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gttgtctgct ctggtatgtg gtgcatgagg atcttgccgt agcgcttcat gttgctctct
                                                                     1560
geetgeteaa aaggeagett geegatgtat egaagggett eetgataatt ettaatgtet
                                                                     1620
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                                                                     1740
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tgcaggtagg cagtcaggtt gtgaatgcgc tgggcatcca gaaacttgcg gatcacgtag
                                                                     1920
gatggeteca aetttecaat ggtteggata tattgetgga cageeceate gtggttgece
                                                                     1980
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tgctggctct tggcaaggtt aatcgccatc tcaaataggt tcttcttaaa cagcatctcc
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agtttggtct gtgtgtcctt ctcctgcagt gcgtggaccc gcccatcccg cgtcagcacg
                                                                     2160
tacagggage eccaeteage aageaeatee aetaeateet eaaagaeggt getatagget
                                                                     2220
atgaacttgt tgcacaggtc atagatgttt agaatctgct tgtcggagct ctgtgaatcc
                                                                     2280
```

```
ctgctggtaa actctgactt gggagaaacc ttccggtcac gggagacaat gataaggtag 2340 cctccaaacc agtgggcaat gagcttatgg ccctcaaagg cgaagcaggg cccacgttca 2400 tcaaggctgg tacaat 2416
```

```
<210> 3425
<211> 4730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(4141)

<223> similar to gi5689571 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3425 caattccaat ggttgtgtct gattttgatc ttccagacca acagatagaa atacttcaga 60 gttctgactc gggatgttca cagtcctctg ctggggacaa cttgagttac gaagttgatc 120 ctgaaaccgt gaatgcccaa gaggattctc aaatgcccaa ggaaagctcc ccagatgatg 180 atgttcaaca ggtagtattt gacctgatat gtaaagttgt aagtggcctc gaagtggaat 240 ctgcatcagt tacatctcaa ttagaaattg aagctatgcc cccaaagtgc agtgatatag 300 atccagatga agagacgatt aaaattgaag atgactccat tcaacagagt cagaatgctt 360 tgctgagtaa tgaaagttct cagtttctgt ctgtgtctgc agagggaggc catgagtgtg 420 tggcaaatgg aatctccagg aatagctcct caccttgtat ttcaggaacc acacacactc 480 ttcatgactc ttctgttgct tccatagaaa ccaaatctag acaaaggagt cacagtagta 540 ttcaattcag cttcaaagaa aaattatcag aaaaagtttc ggagaaggaa acaatagtta 600 aggagtcagg taaacaacca ggagcaaaac ctaaagtaaa acttgccaga aaaaaggatg 660 atgacaagaa aaaatcttca aatgaaaaac tcaaacaaac cagtgtattc ttcagtgatg 720 gtctggattt agagaactgg tatagctgtg gagagggaga catttctgaa attgagagtg 780 acatgggttc tccaggatct cgaaaatctc ccaatttcaa cattcatcct ctctatcaac 840 atgtgctcct gtatctccag ttgtatgatt catccaggac tttgtatgct ttctctqcca 900 tcaaagccat cttgaaaact aaccctatag cttttgtaaa tgccatttca actactagtg 960 taaataatgc atatactcct cagttgtctc tccttcagaa tctattggcc agacaccgga 1020 tttctgttat gggcaaagat ttttatagtc acattccagt ggactcaaat cataacttcc 1080 ggagttctat gtacatagaa attcttattt ctctctgctt atattacatg cgtagccatt 1140 acccaactca tgtcaaggtt actgcacaag atttaatagg caatcgaaac atgcaaatga 1200 tgagcataga aattctgaca ctactcttca ctgagctggc aaaagtaata gaaagctcag 1260 cgaagggttt ccctagtttt atttctgata tgttatctaa gtgcaaagtt cagaaagtga 1320 ttcttcattg tttgctgtca tctatcttta gtgctcagaa atggcatagt gaaaaaatgg 1380 caggtaagaa cctggttgct gtggaagaag gtttctcaga ggacagcctt attaatttct 1440 cagaggatga atttgacaat ggcagcacgt tgcagtcaca acttcttaag gtgcttcaga 1500 ggctgattgt tcctagaaca cagagtaatg aactattcct gaagagcaat gaaacaggtt 1560 ttgattttgt tgtatcctga cttagaacac atcagtcccc atcaacccat gacttctctt 1620 cagtatttgc atgctcagtc aatcacatgt caaggcatgt tcctctgtgc agtgatacga 1680 gcttttgcat cagcactgtg catgtaagat gcacccacaa tggattggtt taatcacatc 1740 tactctgcct tacatgggaa aagttctgca gagagtggtt gtttctgtga cactacaact 1800 gtgcagaaat ttagataatc taattcagca gtacaaatac gaaacaggat tatctgatag 1860 taggcctctg tggatggcat caattattcc accagatatg attcttactc ttttggaagg 1920 gattacagcc attatccatt actgtttgtt ggatccaact acacagtatc accaactttt 1980 ggtcagtgta gaccagaaac acttgtttga agcacgcagt ggaatcctct caatccttca 2040

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aaatgccttc	cctaataagg	acatgaaact	ggagaaccac	aaaccatgtt	ccagcaaagc	4080
caggcaaaaa	atagaagaga	tggtagaaaa	agattttctg	gaagggatga	taaaaacttg	4140
agcaccattg	ctggttccat	ttagcttaca	tgtaaatgta	attatttaaa	acacacac	4200
tgctctgcgt	tgtatagttt	ttcctttttt	gtatgtaaca	gaacacattt	cagattgtat	4260
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ggaccatgca	tccttaaaag	tattgcatga	gcatctccac	ctcagtatgg	aagagggatg	4680
yacaaccccc	tattcatacc	tctgagttcc	tgatggcatt	agtcatatag		4730

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<210> 3426
<211> 5113
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
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<222> (5114)...(1526) <223> similar to gi5689403 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3426 aatataaaca cttataataa tgaaaatata aattattaat tatgcagcat gctttagggc 60 catttctaca gttattatga attacaaata ttaaatgcct ttaatctatc cactgttcat 120 aattotgtaa gooatgttta cataataaac aaaaaacatt tootacatat totgtotott 180 ctgactttta acgattaaag tatttatctt gggctggcaa gttaccctga ccctaaccat 240 taagtacaaa cagggcattg tacacccatt ctaaaagctg gaatcaaaga ataatgttag 300 aagtatttgc aggatttatc caaagaaatg tttagcagac aaatgcaata gaaaaaaatc 360 aagcatttcc caaaatggtg tttgtattag aaagttttaa acttttgtct tcattgtaaa 420 ggtatcactt tattttattt ttaaaaaggcc atgattaacc atttaataac ttacatacct 480 ttacaaaaat aaaactaaca gcttgctggg cacaaaattt actcaaaatc tttctgtatt 540 tttaaaatca gtaagtgatg tatcttacta gcgctttatt ctcacagtgg tattttttta 600 aaagcctgaa cagtgtaatt atttaatctg atgttttaaa ttatacttga tataaaaaaa 660 aagtctaccc aaaccatcac caaaatttca attcaatcta atgtagaaga aacctgagtt 720 tggatgtaga aataattcat tcaatttttt ttctgacatc atacatcatg ccttcaacca 780 aaatagaagt gaagcttcaa acaggactct atggctttat ctgaattttc tqaqtattaa 840 gtaaatctta aatttaaagc agctgttgga ggttaaatgt tctcaaagca atgtaaacta 900 gttataaaat gtctcatcaa agacatcagc agctcttgtg agtcacatga aattaacaat 960 gaaagaagga tcatcagtta tactgtacac tgagagtaca taaaacactt gtgcctcacc 1020 tctagtatca aagccatctt catatattcc ttttataaga atattgatat gtattcttta 1080 tgaacttcag gctcattcct tttgttaagc atgtatttac tggctgtata tagtatatgc 1140 attgaatttc ccatgacttg aaataactat agatcaaaga tctatgcaaa tacaaattac 1200 aaacatgtag attacaagaa atccgaggtg atagtttatg aatctggatt tgccctttta 1260 taacttcact tcaaatagaa acatcttgta ccctcaagtc caggcaaaaa tccaatttta 1320 aaatctcatt cttaaccttt gaaagtagag cctttggaaa cagaatgaac ttcactttaa 1380 agcactgcct ttaagaactg taacatctat tttccagaga tgtgacccag gaaacaattc 1440 atcaatagtt tatccattcc actggcaaaa gttttaacaa ttctgatgat ttcatcatat 1500 gtgcagtgaa taccatccgt atcatttcac aacaggatca gcagacacag tgctgtcaga 1560 caggictcca tigctigtti tagtitctic ticctictct tictiticti ggittictic 1620 agccgcagtc ttgtctgctc tgaagaaaat tcttgcactg ctcagtgaga aatacagcaa 1680 ttcaaattcc tgtagataga catccagtcg cttctgagtg agattcatgg tttgtaagag 1740 tttttcatct tgactggctg actgtacatt ctgttgctta gcaactgctc ttatctcctt 1800 caggitattic tetetaacag actggaacca gigaagigaa teaaacteec qatactgate 1860 caaaagcttt agaatgtaag ccacacccat ggcaaagcca tcatcagtaa aggcagctcc 1920 aattttattt tttttattta atttttcctt gcaactaatg gaatgctcta caaagttgag 1980 ggtcagaggg ggaacaatta tatagaaatt tcggagatgt atattctttg gccttcgaaa 2040 ttctggagca aaaacgtcta caagcatttt ggaaatattc tgtgccttcg gcagaatttc 2100 gtgtgtgatc actgaggact gaatccaaat gccttgctgc ttttaatgtt tcttctgcaa 2160 gaccttcttc ttttactagt tcttcaaaat ttacaatatc ttcaagatca ggaacaaatc 2220 taatggcatt gctgctacaa tgaagaccac cagatcttat cattcgtaca tagcccatag 2280 cattaccaat ctggctgatg agttgcctga attgatcaag gtagctctgt ccctcaggtg 2340 ttattccaag ttttctgatg cctcgattga atttttctgc tctatcaaaa ggatacttat 2400 gatcattttg gtccttaatt tccctgaaaa atcgaatatc tttaatcaat ctggatttga 2460 tgtgttcatc atacataaat tggctaaata tatagaactt ctttttcaaa aactggtagg 2520 tgaaattaac agttgtattc ataattcccg tgccatgtgt tcgaattgaa ttagcaatat 2580 gccgaatatt aatagtattc aaatgcttgt tattgcttgt tcgttcaata aaaatctgat 2640 tgttgagatt atagaggtat cgggacacaa atatatgaat gtttctcata atttctaaaa 2700 catcaaggcc ctgttccaaa gtctgactgg gaagatgtgc ctctgtcata accagtccat 2760 aacgctgagt agctaagttt ctcatctcac tataagtggc ccagtcatga agggctacag 2820 ttgttagatt gtagaaagtc ttgtctaggt agtgagttac gtaagcccga atgtcaatga 2880 aacgattgaa aaaccgaatt ggattcagag agaaaaaaag agccaggtct ttcatgccaa 2940

```
ctttgaaagg gtttcggtca tccagcttta aatgagtatg cacagaaagt cgcagatctt
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tgtcatagca atccagaagt atctcatagg actctaaatg ccttgcatgc atcatagcag
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qtacacagtc gcgcaaagca ctgaacatgt aatgtaatct ggctgcatca acagcatttt
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catatacatc atctaaataa attgggaaga cagctcgatg ccagtataaa aaacaacagt
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ccaaagaaac aataagtcgc cgttgctttg tgcttggtcc atttagagtg ttttcagcca
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<210> 3427
<211> 5195
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(3795)

<223> similar to gi3327166 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3427

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                                                                      120
acgccggggc cacggcaggg gcggcggcct tacgggtctt ctcgtgggca ccctggacgt
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ggtgctggac tccagtgccc gcgtggcccc ttaccgcatc ctgcaccaga cccaggactc
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ccaggtctac tggacagtgg cgtgtggttc ttcccgcaaa gagatcacaa aacactggga
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atggctggaa aataacttgc tccagacact gtccatcttc gacagtgagg aagatatcac
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caccttcgtc aagggcaaga tacacggaat catcgcagaa gagaacaaga acctgcagcc
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tgggatgcct gagggcgaga agctggtgaa ttactactcc tgcagctact ggaagggccg
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gaaagccagt gttgtggacc ctagcacaga gtcttcccca gctcctcagg aggggtcgga
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ccagcacccg aactgcatca ggacgcagcc agggagcttc agcccccagc tgcaggagac
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<210> 3428

<211> 2892

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (326)...(2892)

<223> similar to gi4322670 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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gggttgtgct cgagttggtc tgagtgcagg cacaggaatt ggtgttcat cagctcttgt 360
tagcaaccag aactccaaca atgacgataa taatgcccag aataacaatg ccaacatcca 420
```

```
cgacaacaat caccatcatc cagatgactc agacgaggag aatgactttc ggcaagatct
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gcagccagga gagcagcagt ttgcagctga cgcattaaat gagatggaag acatcgtcca
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agaagatgga gaggtggtgg ccgagagtgg aaataatact ccagctcaca gccaggcaat
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ggatattcct gaaaagaaaa aaaacaagga tgtttatccc agctgcagca gcaccaccgc
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cagcacagtg ggaaactcca gctcacacaa cactgcttct caaagccccg actttgtaag
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gacggtgaac agcggcggct cttccgagcc tagccctaca gaagtggatg tgtccaggca
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gtgtgcctgc tcccccggtg ggtcagagga ctctqaggcc atggaggagg gagatgcaga
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gagttetgte tgccccagat gctgctgtca caggccccag gaatcccaaa ggagaactag
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tggtacgaga tccgcctttt cctttaggac tctgccacaa ggggggtctt caggcccagc
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acatgatgag aggactaatg ggagtggctc tggggctaca ggtgaggaca ggaggggag
                                                                     1440
ctcccagcct gagagttgtg acgtgcagtc taatgaagac taccctcgga ggcccctaac
                                                                     1500
cagggccagg agcagactgt cccatgtact gctggtatct gagtcagaag tagccaaaac
                                                                     1560
aaagccacgt cacgccatga aacggaagcg gacagcagat aaatccacta gtacaagtga
                                                                     1620
tcctqtqatc gaggatgacc atgtgcaggt tcttgtatta aaatccaaga atcttgttgg
                                                                     1680
agtcactatg accaattgtg gaatcacaga tctagtgcta aaagactgtc caaagatgat
                                                                     1740
gttcatccat gctaccaggt gcagggtact aaaacattta aaggtagaaa atgcaccaat
                                                                     1800
tgtaaaccga tttgactatg cacagtgcaa gaaactgaac atggatcagg tactagacca
                                                                     1860
gatactaaga atgccacccg agagaaaccg catcatatac ctacgcccaa tgcagcaggt
                                                                     1920
ggacacteta actttggage agaagetatt tagtggteee taccectate acatetgtat
                                                                     1980
tatccatgaa ttcagtaacc ctcccaatgt ccggaataag gtgcgcattc gcagctggat
                                                                     2040
ggacactata gcaaacatca atcaagagct cattaaatat gaattettee etgaagecae
                                                                     2100
tcgaagtgaa gaagacttaa agaaataccc caagtacccc tgggggagag aaatctatac
                                                                     2160
tttagaaggt gttgtggatg gagctccata ttccatgatt tctgacttcc cttggctgag
                                                                     2220
gtcattacga gctgcagagc ccaacagctt cgctcgatac gactttgaag acgatgaaga
                                                                     2280
aagcactatc tatgctccta gaaggaaagg acagctgtct gcagacatct gtatggaaac
                                                                     2340
aataggagag gaaatttcag agatgcgtca gatgaagaag ggtgtatttc agcgagtagt
                                                                    2400
ggcaattttt atccactatt gtgatgtcaa tggagagcca gttgaagatg actacattta
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attggtccct cctcctttcc agctattttg tcagaaagca agtagggcca tccagctgcc
                                                                    2520
agagtgctcc acagggactt gaggcatgca gttgggaggt cctggctcgg tttgctatat
                                                                     2580
agggaatata taaggaacat cgaaattgta tacaaagatt tgtacataaa aaatatacaa
                                                                    2640
agacgcttcc taaagtacca actttatatc atatggttta taccatttaa tttaaaaatt
                                                                    2700
ccatttttaa ggaagacaga taatttgaaa aacttttggt ttttcttgac ttaattcatg
                                                                     2760
aaagtatcat tttttgactg agtctccatt tacttcattc ttaaatggat taattgtcca
                                                                    2820
tcccctttaa atcctgtgcc tttttcttcc tggagcgacg ggttttgagt agacctggtt
                                                                    2880
gaagagtgaa aa
                                                                    2892
```

```
<210> 3429
<211> 1068
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1067)...(216)
<223> similar to gi5915916 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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caattatgga tgcccaaaga ctgggcaaaa tttgtccccc gaaggcatcc tgagggccac
                                                                      120
aaaggctccc ctcagttcac aaaggtagct ggcaggatgt tagctttgcg ctcagcttca
                                                                      180
atgcagtact tttcggaaag gccaggggct ctcagctttt caagcttttt cctcttgatc
                                                                      240
tcatcgatgc gctcacggcg tttctgggcc tcctctttga ggcgccggcc ctcctcaaag
                                                                      300
gtggcaatcc ggttctgcac ttccttctgc tggttctcgc gcacctggcg ccggagctca
                                                                      360
ttggcatgct gtaagcgccc tgtggccttt ttctcctcct ccagccgctc cttctcaatc
                                                                      420
tgttctctct gagcccgaag aatcctctcg aactcatccc ggtcccgttg cacctgaaca
                                                                      480
gccagagegt gctccttgaa agccacctgt tegageegae tttttegeag etcageetet
                                                                      540
gtttccatct tcttccgcgc attttccttt tcctttctgc gccactctct gtctgcaacc
                                                                      600
tectggttge gettggeeeg caaggeatee tgttetgeet ggtaateetg ggeettetee
                                                                      660
tgcatggccc tcaagcgtgc gatctccttc tctttctccc tccggattct ctcctqctca
                                                                      720
gcctcaaact ctgcttctcg agccatcttc ttcttggtaa actccatcac catctggtct
                                                                      780
gccagcttct cctgagccag gagttctgct ttctgtttct ggttttcatc attgatgcgc
                                                                      840
ttaatctcag cttgcatctt cagtttttgt tgctgccttc gttccatgtc ctttagatct
                                                                      900
tectettgga getgtteeat atatteeage atetgeteet teteetgete cegetgetea
                                                                      960
gcaagcagcg atcgctcctc ctggttcttt tccatctgtt ccacaatttq ccqccttcct
                                                                     1020
ctaattettt ceteceteet etteetete agtteeegga egegtggg
                                                                     1068
     <210> 3430
     <211> 2388
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2389)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (1677)...(857)
     <223> similar to gi4218005 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3430
cgactttttt tttttcacac ttgaatgctg ttactattta ttgacatcaa aacgaaacaa
                                                                       60
gctgagacta aaagttgcta tttaacagga atagacactg gtgcagtttc cttcctggag
                                                                      120
agggtatgca ctcagatcat gagacctaag atcaaacaca ctggattgtc aaagagtcaa
                                                                      180
acaaggacta caattttaac ctccttaata gaaaagatgc tgatgacaaa acacgaagtt
                                                                      240
taaaaatatt ctttacgcta agctcatata agcaaacaaa aaactaaaac taatcctaaa
                                                                      300
actttaggac actggataca gaagtaacat aactatttaa atttttgtat caacgaaagt
                                                                      360
gtgttctatc cttcactgta cctgtactac aaggacatgc ttgttgcttc tacactaccc
                                                                      420
aatgtcaaca cttatcatca acaatacaat agaattagat cggaacaagg cttcaaagcg
                                                                      480
actctgctcc acccaaattc agaaaattca attcaggatg aacaacagct tttgatttta
                                                                      540
```

```
gaaccagete ttaettttet etegtgteat atgtgatgaa gteeteactt gacaatteee
                                                                    600
cctgcaaatt gcaatgcatg tccttgccgt cacctttttc tgacacttta aaattaattt
                                                                    660
gtagaaattg caaaagcaat gaaattgtac ttccaattct gaacctctga tcagattcct
                                                                    720
getttgacac aagaettaet eetetgeagt gtaceecace ageacagegg etecetteet
                                                                    780
ctctattctt tgccctgaag gcacctctgg attgcttaac gtgtgctctt tggctgccta
                                                                    840
gacagtcagg acacctaagg ccatctggac ttatcactcc tctcctcctt ctttctatg
                                                                    900
gctaatacca ctttcctgct tcctttctgc tgctgaatct ccagacttgg tgctgtcatc
                                                                    960
agggggacag agtcgatttc ggcttcgagc tcctggttgg taaagctgca tcgctggacg
                                                                   1020
atccttgttt cttattcgat ctctcttgac cacttcttct ttcttttcag ttttttctga
                                                                   1080
gctgcctatt gattctgtac tttcagcctt ctttccttta tcccgaagtg tgtctttctc
                                                                   1140
ttttttcatt tcttcttt ttctcttaaa agtcttctct ttctcatagc gctccttctg
                                                                   1200
cctacggcgc tettettett geogetteag cetetetett tetegaagta tgegeteetg
                                                                   1260
atctcgttca tattcccgtt ccctctccct atagtctctg ccgctctcat cttcaggtct
                                                                   1320
ctttggtttt tcatctttaa gttcgctatc agaacgcttg ggcaatgtac aactttgccc
                                                                   1380
actggctctt tcatcactga gattctcttt gtccaatttc ttggcttttt ctctttgtc
                                                                   1440
caattetttt teateteett tttetggett ettgageage ttaatetttg gtteateett
                                                                   1500
taatttgtcc ctttctggaa ttctgtctat cttctttagc ttttctatat ctttcctttt
                                                                   1560
1620
ttctctcctc ctcctttctt ctctcttttc ttctctcatt ctctgcttgt ttttcaggaa
                                                                   1680
gctcaaaagt ggggttgtct ttttagctat taattctcta ttttttgctt ctatttcctc
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                                                                   1800
ctttctatat tctggatcat catcgatagt cccgactttg gtatctcttt tcttagtctt
                                                                   1860
cttttttgca gctttttgaa aaggtgcaaa ttctactata gcgggatatt cctgaccttt
                                                                   1920
attgtcaagg aatacataac catcaaagcg atccctgaac aaaataatgt cctcttggtt
                                                                   1980
tttaaagttg atgtatgctc tggcatacat atgaggatac aaactcgtat cattagaaaa
                                                                   2040
aaactcaaaa taatcatgct caggcatagg ttgaagatgt tcctgaagct qctccttqqt
                                                                   2100
caaagtggga ggtaatcttc gaattaccac cttgctcagc gcttctttct tctccttgtt
                                                                   2160
gcgatcctgc ttatcttccc ccttggagct gtcccccgag gtcccaccac cgctgccgt
                                                                   2220
ggccccggcg ggggttaaca gggttactcg cttctcctta ggcctgtgct ccttctcttc
                                                                   2280
cttcatggct acgtcccccg ctgaagcggc ttggccggaa cggggttacc ccgggcacaa
                                                                   2340
acgacgaaat cgtcgacccg gtnnaacggc ccagtactnn ngaggtca
                                                                   2388
    <210> 3431
    <211> 3239
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (3240)...(270)
    <223> similar to gi5817132 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3431
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```

```
gtcgggtccc ataaaggagc agaacctgac ccagagcctg cagtacattt ccaccccaca 120 ggggtgcagg ctgggccagg cagggccaaa ggcagcagaa atgggagtaa gagactgtgc 180 ccactgagaa gctctgctgg gttgtgggca ggtgggcatg agatgatgat gatgtagtgt 240 aaggaccagg taggcaaaac ctgttcaggt cttgttgagt gtccagagtg gatccagaag 300 gctgaggggg tcgtcagagg gccgggtggc ccgcagccct tgcccgttat gggcctgcag 360
```

```
aaagttatgc ttgctcatcc gctgtttgcc ccgcagggag ctgtccaggg agaaggcctc
                                                                     420
tggggtcaag gaggccagca attccaggga ggaggggg ggccccgagc tgggggcttc
                                                                     480
aggcactggc ggctcctcct taggctgggg agcctcaggt agtggggagg aaaggggggg
                                                                    540
tggggaggaa gatgggattg gggtagactc tgggaggctg gctggcggga ggcctggggg
                                                                     600
ctctgcaggg cctggcaagc tggcaaccgg ggactccaac cccccaggag gccgaatgct
                                                                     660
gagcttggca atggtggcct ggatggagct gatgggcaca tccccaccga ggaccaggtc
                                                                    720
ctgggagtcc tgaggaaggt ggttcttctg gctgatgctt gcactggcca agggtttgca
                                                                    780
tggaggaggc acaccatggc gctgcaggac ctgctccacg tgtctcacca ctgcctcata
                                                                    840
gcagaacctg aggtgcaget teteetgcag catgtgettt etetgetgee geatgegeeg
                                                                    900
caccagctga ggcagctcag ggattccgtt cccagcctcc acctcctgca cagctgcata
                                                                    960
gagcagtgca aaggctcccg tgcggcccac accagagctg cagtgcacaa tgatgggcgt
                                                                    1020
gtgcagaggc cgctgatgca ggtaatgtgc gtgcacctcc tggatgaagc gcagcaagtt
                                                                   1080
gctggggctg tcgggcaggc ctaactcagg ccaagtgggg aagtgcaggt gcacaagaga
                                                                   1140
gcgcttgagg ctctggtctc ggaactgcag gctcagcacg cgctccacat gggtttcggt
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gctgcggacg ctgctcaatg ccaggctcag ggcaccgtgc accatgggct ggcccctctc
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ggtggggaag tagcgtgcca ctttttgctt ctccatctca gcctcagaaa ccagcatgac
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aatgactgac actttctgct catggaccat gagccagaag tcagcagctg tgccaggcag
                                                                   1380
tgggggcctgg gttgccacta gcggggggca gtatggggag agcccctcca cqcaqctggc
                                                                   1440
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atcctggtgc cggttcttca gtgagtagca gcgggcaatg gcgatggaac ggcctcgggc
                                                                   1560
atcatgttcc tgcgcatctt gcagctctcg ccagacagtg tccagagctc ccacatcccc
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ttctgctgct ggggggcgag ggggtaccgg accaggccct ggagatgggg caggtgaagg
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caccaggtgg ggactagggg tggactggcc agcagacgag ggccctcgaa tggtaagagg
                                                                   1980
ggctgcctgg gggcccatgg gtctggtaga aggggcagga ccatatgcca gtgggggatg
                                                                   2040
gggaggctga gggggcccag ggctggggaa aggcagagcc cctgagtggg ctggcagagg
                                                                   2100
                                                                   2160
gtettgageg ggacetgggt agagetgggt gtgtaagggg gggtggegge tgeececagg
accccaggct gaggggcata ggggtagggg gattgtgggg gtaggagtcc tggggcctgg
                                                                   2220
ggtgggaaga gatgtggatg ctggagtgga aggggctgct gtgggggctg aggcccaaac
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gcttgtgaag gatggggctg aggatggggc tggggctggg gcccaatcct tggggctgga
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2400
gcagggtagg tgtaaggcgt gggcagtggc tgcggtgggg gcacagggaa gcagggcggg
                                                                   2460
ggaggagcag gggtggggtt tggccgtggg gctgtgtggc tggggatggg cgcctggatg
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ctatctactg tggtggtggc tggccgaacc gccatggcca actcggggcc tgagaattga
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ggaggtgggg ccgaggggag acctgcaact ggtggggccg gccctacccc cacataggga
                                                                   2640
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                                                                   2880
gcacttccca ggaaggtgtc aggcagtcgt gggccagcca ccatgtcagg ggggaggctg
                                                                   2940
egeageteet caggggggte teetgettee actgeeteae teteeteet geggggeage
                                                                   3000
ageggetttg gggetgtggg eegtggegge ggettettet teageteeet gteeaggage
                                                                   3060
tgctggcggg cagcctcgcg ggcctggcag gtggactgcg tgcgctccag cagagcagcc
                                                                   3120
accttgetet ceagatetge gtagaagtee etgeeeteet gegaettett cateaggtee
                                                                   3180
tcataggett catacgagge caccagggte tgcagegtgg agttecactt ttggteece
                                                                   3239
```

<210> 3432

<211> 1539

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1051)...(215)
<223> similar to gi598332 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3432 ttttttttt ttgaaaatac cacattaaag atatatttat atacagaaaa tggcagcaat 60 gccaataaaa ttttataatt taaaaaagtt acttgttaaa ggcagatttc ataagttgtg 120 tttacaatca tccatttaat catctccaaa aaaaggatga atttattatt ttaaactaac 180 attctgtaag ttaaagagaa taatcaagtt gtctcatgga ctggaaggtg acttattaat 240 tccctttcat ttccaaacct catcaagcag tcactacatt tatgaggcaa gtcagctgaa 300 tgcttgaaat ctagatgaat tttaagatct tcaatttgtc ctgttgaata ttcccaatat 360 tgacataaat aaatcccttc agataaatgt gaatttaaat gcttggcaat attctagcat 420 acttgaaaag cctttcccac agtcatcaca aacatgagga aaaatttttg tatgttcaat 480 agcaacatgc ctgttaacat ttgtgtgaag tctactccga aaaccacata cttgacatac 540 aaagaagttt ttacatttgt caaaggtaat tttgcttaag aggctatact gtccatgttc 600 accattgtta tacttatcac ttaactctat taatttacat gcatgctcat ttaccacatg 660 gctatgcaag tcttctggat cattagtttc atgttcacag aactgacaca agtactgttc 720 atcacagctg tgctcctgga aatgtaggta gagttcactg cttgaggaga actgtacatc 780 acactgttca caccaataga ggtgatcact aaaatgggtg tctgcaatgt gctggctgag 840 gttctcaaaa attactgtct tataatcaca gtatttacaa atgtagggat cctcttcatg 900 cagtttggca tgttctatca gaagcatatt ggtagagaaa ctttccttgc atactcgaca 960 cacatttgaa tcagtacgtt tatgcttcag gatcatatgc tgctttaagt cagaaaaata 1020 tttgctgtta aactcacaaa gttcacattt atagaggcca ctgctattag ctctcagtaa 1080 aggccatttc tgctgggcag tcacattcaa agcttggctc ttgtcaagaa ttttacaaag 1140 tttagctggc ggttcttcat cagtttggtc ttggagactc tcagaggaat tgttttctgt 1200 ctctatatca taatcctcag aaatcgcatg cacttctaca gcaattggaa catcttcagc 1260 agtgtgaact totataggac totootottg ggtttgotgg ttgactgatt caqgtgagto 1320 acactettea teacaaatta caatateage agatttttet gtagaaaagg cagtgtggte 1380 tagaattcta agtacaggac tgggaaccag gtagttctga tttctgtttc tggccttgat 1440 tccatctgca aattttggca agtcatttga caacaaagat gatgattctg ataccgagac 1500 gtcaaatgac ttgccaaaat attttaaatc tggctgtct 1539

```
<210> 3433
<211> 4936
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(3978)
<223> similar to gi3327082 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3433

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ggttcgcttc ggcgtccgcc gtctccgcag ctgcctcctc ttcctccttc gccaccgccg
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ccaccgccgc cgccgccgc agcaccgcag cccctcccgc catggccgcc gccggcgccc
                                                                      120
ggctcagccc cggccccggc tcggggctcc gggggcggcc gaggctctgc ttccacccgg
                                                                      180
ggccgccgcc actgctgccg ctgctgctgc tgttcctgct cctgctgccg ccgccgccgc
                                                                      240
tgctggccgg cgccaccgcc gctgcctcgc gggagcccga cagcccgtgc cggctgaaga
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ccgtcacggt gtccacactg cccgccctgc gggagagcga catcggctgg agcggcgcc
                                                                      360
gcgccggggc cggggctggg accggggccg gagccgccgc cgccgccgcg tccccgggct
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ctcctggctc tgccggcacc gccgccgagt cgcgcctcct gctctttgtg cgtaacgagc
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tgccggggcg catcgcggtg caggacgacc tggacaacac cgagctgccc ttcttcaccc
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tggagatgtc tggcacagcg gcggacatct cgctggtgca ctggagacag cagtggctgg
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agaatggcac cttgtacttc cacgtctcca tgagcagctc cgggcagctg gcccaagcca
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ccgccccac tctccaggag ccctcggaga ttgttgagga gcagatgcac atcctccaca
                                                                      720
tttctgtgat gggtggcctc atcgcgctgc tgctgctgct gctggtgttc accgtggcgc
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tgtacgccca gcgacgttgg cagaagcgtc gccgcatccc ccagaagagc gcaagcacag
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aagccactca tgagatccac tacatcccat ctgtgctgct gggtccccag gcgcgggaga
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gcttccgttc atcccggctg caaacccaca attccgtcat tggcgtgccc atccgggaga
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ctcccatcct ggatgactat gactgtgagg aggatgagga gccacctagg cgggccaacc
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atccagggga agagaaggtg gactttgaga agaaaggagg aatcagcttt gggagagcca
                                                                     1140
aggggacgtc gggctcagag gcagacgatg aaactcagct gacattctac acggagcagt
                                                                     1200
accgcagtcg ccgccgcagc aaaggtttgc tgaaaagccc agtgaacaag acagccctga
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cactgattgc tgtgagttcc tgcatcctgg ccatggtgtg tggcagccag atgtcttgtc
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cactcactgt gaaggtgact ctgcatgtgc ccgagcactt catagcagat ggaagcagct
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ccctgtatta ccagatcaat gccacctccc catgggtgag ggacctctgt ggacaaagga
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cgacagatgc ctgtgagcag ctctgcgacc cagaaaccgg agagtgcagc tgtcatgaag
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gctatgcccc tgaccctgtt cacagacacc tgtgtgtgcg cagtgactgg ggacagagtg
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cccctgaaaa gattctcagg tctactttca gcttgggcca aggcctctgg cttcctgtca
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gcaaaagctt tgtggttccg cctgtggagc tgtccatcaa ccccctgggc cagctgcaag
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                                                                     1860
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                                                                     1920
aacaatgggg gctgcactcg caacttcaag tgtgtgtctg accggcaggt ggattcctcg
                                                                     1980
ggatgtgtgt gccctgagga gctgaaaccc atgaaggatg gctctggctg ctacgaccac
                                                                     2040
tccaaaggca ttgactgctc tgatggcttt aatggcggct gtgagcagct gtgcctgcag
                                                                     2100
cagacgetge ecctgeeeta egatgeeact tegageacea tetteatgtt etgeggttge
                                                                     2160
gtggaggagt acaaactggc tcctgatgga aaatcctgct taatgctctc agatgtctgc
                                                                     2220
gagggcccca agtgcctaaa acctgactcc aaattcaatg ataccctctt tggagagatg
                                                                     2280
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                                                                     2340
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                                                                     2460
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                                                                     2520
cgggtccgga gcaacctcta ccgtgtgaag ctcagcacca tcaccctcgc agcaggcttc
                                                                     2580
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                                                                     2640
cagcactatg gctcccacta catcgcagag gccctctatg gctcagagct cacctgcatc
                                                                     2700
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                                                                     2760
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                                                                     2820
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                                                                     2940
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                                                                     3180
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                                                                     3240
gaccaaggtc ttccgattat tatttttgca gcataagaaa gtggatgaat acacagacac
                                                                     3300
tgacctgtac acaggagaat teetgagttt tgetgatgae ttaetetetg geetgggeae
                                                                     3360
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                                                                     3420
```

```
catcttcaag tgtctggagc ccgacggtct ctacaagttc actctgtatg ctgtggatac
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                                                                     3600
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ccgagtccag caccactaca actctcacta tgaaaagttt ggcgacttcg tctggagaag
                                                                     3720
tgaggatgag ctggggccca ggaaggccca cctgattcta cggcgactgg agagggtgag
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ctatcttttc tgccgcagcg aggaggtccg gcctgcaggc atggtgtggt atagcatcct
                                                                    3900
caaggacacc aaaatcacgt gtgaggagaa gatggtgtca atggcccgaa acacgtacgg
                                                                    3960
ggagtccaag ggccggtgag ggagggtatt gccctccgtg agcacagaga ctctccatgg
                                                                    4020
gagggggagc agtattetee tggateetgg ggeetgggtg ggetgggga eagetgagga
                                                                     4080
tgggcctagc agatgaagct tgccagcaag gccaatagca aacggtttct cctgtggata
                                                                    4140
gtggacagag acctttgtaa ccaatggaat tattcatttt tctctatctt ttatttttc
                                                                     4200
aaagatatta tttgactcta tcaaaagtct ctccttttta aaccttttct tatggatggc
                                                                    4260
tgtcaatccc gaggcagaag ttttcaggtg gagaccaagc ggcctttgct cttcttcctt
                                                                    4320
cttcctgcca cactctgctt tcttcctgcc atggacccct ggaggagacc tatggaggga
                                                                    4380
cagttttgac ctgaccccta gaggagacag ttttgacctc ttcagcacca ggaaggaagc
                                                                    4440
tctgaggatg gttgcagtga ggaagcatgg gtctttaagg acttctctct cttttttgct
                                                                    4500
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                                                                    4560
ccctgcaggc ctgtccatgc attaaaaatt cctattgtct ctctttctgc ttgggtggta
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                                                                    4680
ctgtgccagt cacagagcat atgcaactaa agacagagaa gcttccttcc ctcagggaac
                                                                    4740
ttattgccca gtggaaatta tagagaagga gtctggtcat ttcaagctgt gctagaggaa
                                                                    4800
gaatggaggt tetttgcact caetgttaga geatgagaca eaetggaggg eteetgaaat
                                                                    4860
gcttccttga aaaagtgata cctaaaccca aaggatgagt agaaataagc cagacagaga
                                                                    4920
ggtgaaaaag atggga
                                                                    4936
```

```
<210> 3434
<211> 2290
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2288)...(245)
<223> similar to gi5052554 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3434
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gttctgctgg ccaagccagc ggatggctgt gggggtccca gctcagtctt ccaagggcqa
                                                                      120
gactgtacag ccttgctgtg gggggttggg ggcagggttc cctcccgggg ccctgttggg
                                                                      180
gttcccgccc agcggcagcc agggtgggca gtgggtacca gcactgccat ctcaggaagg
                                                                      240
cactttcagc ttcggggtcc ccaggaagaa ctgcaggacg cggtcggcca ggagcgccag
                                                                      300
gcagaagtcc aggagcagga cctgggcaat gaccagcttg aactccacag ggatgtccac
                                                                      360
gaggccaaac tggctgttga agtcgggcga ggagccgagg agcaggccaa tgatggccag
                                                                      420
gagtgaaact gccagactcc acaccagggg cttgttctcg ggcaggctct ccatgaaggg
                                                                      480
cgggcctttg taattgatgg cgaaggtggc catctgcatg gccatggcca tgatgtagac
                                                                      540
ggtgctgttg accaggcttg gctcaaactc cttgtacaag tccacgaact gctcctgctt
                                                                      600
ctcggggctc cgggcctggg cctcacggta caggtagaca aggctcagga agtgcacaaa
                                                                      660
```

```
gaactggagc atgacggtga ggatggtgta caggttgaag atgttgggca ggggccgttc
                                                                      720
tcgggagagg gtcttgaggg gcttggaacg ggagatgaag aggaagcagc cggccagcag
                                                                      780
cagcccctgt agggtggcct ggaagtcact gaacttgact ccctccaggt agaggacgct
                                                                      840
ctggctgtag gccaggatga gggcattgag cgccaggatc ttgaacatct gtagcgtggt
                                                                      900
caccagcgtg cagcggccct gcttgatcac gtggcagatg cactggatgg atgagagctt
                                                                      960
ggaggtgaag ggtgctgcga tgctggcatc ccccaqtttc acaatgggcg tactctcgtc
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ctcgaggtct cgcagcacct ggctcaggcg gtccctctgg gaggttggct gctcctcgga
                                                                     1080
gggagggage ecegaceget gettggetgt eetggaggtg getetgatge eactgttget
                                                                     1140
cagggttggg ctgtcccggg gccgccgtcg ccgctcgaca acccgctcag gggcattggc
                                                                     1200
caagagcgcc acacccacgt cagcatgctt cagggcgccc acgtcgttgg tgccatcccc
                                                                     1260
acacatgagg gtcacgtagc ccagctcctt caggctggtg atgacaaact ccttctgctt
                                                                     1320
gggagccaca cgggcgaaca cctgcacatg ggggatgagg cggagcagct gctgggggtc
                                                                     1380
ggtggcctgc aggtgggcca agccgtcgcc tgtgaggcac agtgcgtact ccagggccag
                                                                     1440
tgcctttggg gagccccggg ccaggggcag cacgatgctg ccgtcaatgg agcgccactc
                                                                     1500
gcactgccgg cctttctcgg agggaggctg caggatcagc gtgtgggcct tttcaatgaa
                                                                     1560
gtgcagctcg ctgggccacg tggcatgcag tgagcgggtt gtctcccgtg atcatgacca
                                                                     1620
cccggtggga cgcattctgg atctcccgga tcacggcctt ggagtcagcc ttgagcgggc
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aggagaccac aatgaagccg acgaacttga ggctgcactc cagggcctcc cgcttgacct
                                                                     1740
cccgggcctg ctggtgagtg aggtgtccca gctccttgta ccccagcgcc aggacgcggg
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ctccttcccg ggagatctcg gtgtggatgt ggtggtagtc gggcgggcac tgggagaaca
                                                                     1860
tggagtgcag agtttcgggg gcccccttca cggccgcgat gtagcagagg tcggtggagc
                                                                     1920
ccagcttttc atacgaggca agcacggaca ttcgcttcag ggcactggca aaatgaaagc
                                                                     1980
gctggtgaat tttcagcccc tgagttttaa tacttcgggg gaatactttc tcatctttgg
                                                                     2040
tcagcgtcca gtccacggcc gtcagcatgg ccttctctag agggtcaccc acgagggtgc
                                                                     2100
cgtcgtccag ctgcatgagc gagtggcacg aggccagggc ccgqtqtqtt tctacaggga
                                                                     2160
tgctggacac tggggtcacc tccttcccgc taataggccg ggatacaccg cgcaccaccc
                                                                     2220
agetyteeet ggteaacggt ceegtetttg teaaageaac ceaacetteg acetttteag
                                                                     2280
caaaggggga
                                                                     2290
     <210> 3435
     <211> 3109
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
    \langle 222 \rangle (3110) \dots (478)
    <223> similar to gi2465540 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3435
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                                                                      120
ctcccttttg tttagataat tctgggcaga aaaatatatt caaagattct gagtaagata
                                                                      180
aaacaagtaa taaggaaggt ataatctgtc atgagattag agtttaagaa accaacaaaa
                                                                      240
aagggaaggt gtaatatagc atcatctctg tgtgaaaaat ataactttaa aataatacat
                                                                      300
attcatagga attgaaaata gagaaaaagg gaataataaa aaattatggc ttttagggga
                                                                      360
cttaaggaaa aatagaaaac tttattttac aattctccag aaaaaaatca cttatatttt
                                                                      420
gcccaaaatt accttataca gtaaattata tattaaggta gaccattaat taagcttaaa
                                                                      480
tagtggtttc aaatgttggt aaatatgtct tttagttgca aaaatttcag agacaggctg
```

540

```
caactttatc ctgatagaag tcaaagccca gtggagaagt tctacatcac ggacccgggg
                                                                      600
caatgtgagc tgtaaatctt tcttcaaccc aaagagcttc tggtttacct tcaggacagc
                                                                      660
tctccacgtt ggtaggtcgg tgagggatga taaagggtag gacatccagc cacccagggc
                                                                      720
aqttttccgq tgtgtggctc ttgtttttac aactggtcag caccacaaag tagtgtgttg
                                                                      780
ggatgggaac atcagtgttg gctaaatgtt tggtaatttc atctggagca tcaaaatggc
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catcataatt ataatcaaat attggtccac taaccacatt tactccattt ctttctgtgg
                                                                      900
catgttttat aagaagaaca ctgtggaagt agtcccacat ttttctgaat tcttcataca
                                                                      960
taggtaccaa attgctagta attaaagcat catattggct atctgatgtt ctattgctgg
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caggaggata gaggaagccg tgggtgatat tcttgtctgc taaatagaag gaacattttt
                                                                     1080
ggctctcaga aggaggaacc ctgacatcag cccgcagaca gtctgggaca gtgggaggca
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gaggcgatgt gtctcccaac tgggggactg tgtatgaact ccacatgggc atcctcatag
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cttttccaaa tccactgaca tattccctgt ggtaaaggag acagtggtcc acgttcttct
                                                                     1260
gcagtaccct aggcctccca aatggcaaat ttactttcac tgttgctgtt atttcttctt
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qqqtqaqatt tagcatctga ttcacttgtt ccagctgagt actattttgt aggtgagggc
                                                                     1380
agaaacagtc aagagactct gtgggcaatg gattagcaaa gccacaaaca gaaaactttg
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acacctcctc tgcatgggat ggctcataaa aaggcacctt cagaagatgg tttaaactac
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catgggttcc attgtttggt gctggttgaa tgcgtagaag atcacacatt aggttataga
                                                                     1560
cttcaatatt ttcaaatggt tcaacttcag tcttctcttt aaaactgggt ccatgtgcca
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                                                                     1800
tgaaatgctg atcaggtttt cggcaactga ggtttctaac aatttcctca gaattaaaac
                                                                     1860
taaaaaagtc atgaggtata ttatgagctc ggatgcgggg ggcaggccct tcgtacatgt
                                                                     1920
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ggtccattcc atggtcagcc agaaggatga tattgacaca gttgtgcaaa ttccgctgct
                                                                     2040
tcaggccttc catcaacatc ccaaaagcat gatctactac ctgtaaggct ttaattactc
                                                                     2100
tggcactgac tggtccacct gcatgtccag aggaatcagg ttcttcaaaa tacatggtat
                                                                     2160
aaaacctggg tctttcagct ttgggcaggt ccagccattt taacagtgta gaaatcctct
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                                                                     2280
ccacttttga tccgggccaa aagtaggtag cggcttttaa accttgatac attgctgtca
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gccacattgg ttgcccatgc caccaggctg gattattttg ttcctttgaa gaaagtgaaa
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aattottgtt gagatttaca toatacatat tattgtcaat gatgccatgt gactotggat
                                                                     2460
acaagcccgt gacaatggtg taatgatttg ggaaggtttt ggtaggatac atagctctca
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tgtattttga atgaattcca catgttttca gtttattgat atttggcatt aaagtatccc
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caaaccette tgggcactga gactgetggg etgtgteaca gttttettee agecatgagg
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tecatatteg agttgattee acaeaggtgt etteaaaate eeageageaa teaeeteggt
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ctttacatgc cacatcacac cggcagttct ccagtcctct aaatgatgca tcaaagcact
                                                                     2940
tetteetgea getgeettge tttteeagtt teetgagtee aageeceagg eetaateeaa
                                                                     3000
gtgacatgat caccagcaaa gcaagaagaa caatgcaagc tattttatat ttcttaagag
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                                                                     3109
```

```
<210> 3436
<211> 2899
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1583)
<223> similar to gi4159682 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<400>	3436					
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gcgcaggagg	tcaccatggc	tattattagc	tcccttacta	tececageta	ttccccaggt	180
cacctcccca	ccttgctgcc	tatatccaga	aggcgtgcac	caattccaat	ggatcagaaa	240
	gaatttggag					300
gtttttcgag	ctcatgaagg	ggcagataag	agtagccaag	addcadatca	tgatggcatc	360
cctctacctq	gggacaggtc	ctttggaaca	ggagctggtg	gactgcctgg	aaagtactct	420
agaaaagtca	ctccaagcaa	agtttccttc	aaatctcaag	gtctccattc	tcttagactt	480
cacqcqqqqc	tcacgaggcc	ggaagaactc	ccacacaata	ctactcccac	tectacagaa	540
gttcccagag	caggtccgag	tctccctctt	tcacacacca	cacctccgtg	aactacttca	600
	cctgagcgct					660
cttcgacaac	agcgtcatct	tgagcggtgc	aaacctgagt	gactcctact	tracraacco	720
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ggtggacgcg	gtggggatg	tatccctaca	actacagaga	gacgacacgg	tacaggagee	840
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gccctgcagc	agcagcttca	ccaggagcaa	gagcagctct	acctgaggte	aggtgtggtg	1500
tcctctqcca	ccttcgagca	accaaatcac	caggtgaagc	tataaataaa	gatggtgact	1560
ccactgatca	agaacttctt	ctgaggacag	acaggtgctg	tctctagcat	cacctctcag	1620
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ccggctgtag	tgcacagggt	ggggcgtcgg	tagagccaga	ccatagacta	ctacctagac	2100
gcctcgctga	catccctgtg	ctgcggttac	agagetgege	ccttctagac	tctggaagtt	2160
gagtaacagg	acctgctctg	cccacccagg	aggggcctgc	cqcttcacca	gaggcaccag	2220
tggggtccca	cagtcacctg	aggtacccct	ggactgtctt	gacgcctaga	ggtccgggca	2280
gggggtggct	gccattaaag	gtggggtctt	tgctgagtga	ccttttgtgt	cctggatccc	2340
	gactgcactc					2400
tggatgttgt	gggtagttct	gttgctttgg	atggctgggc	ctttggatgg	taacttataa	2460
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tgtccgtatt	tctaaataac	gtgcatatcc	tgctgtcttc	ccccaaaatg	tgtacttaac	2820
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aatacctaaa				-	-	2899

```
<210> 3437
<211> 2461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(693)
<223> similar to gi3676132 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3437 gctttcgtcc ccttcctctt ggtgacctgg tcgtcagccg ccttcattat ctcctacgtg 60 gtcgccgtgc tctccgggca cgtcaacccc ttcctcccgt atatcagtga tacgggaaca 120 acacctccag agagtggtat ttttggattt atgataaact tctctgcatt tcttggtgca 180 gccacgatgt atacaagata caaaatagta cagaagcaaa atcaaacctg ctatttcagc 240 actcctgttt ttaacttggt gtctttagtg cttggattgg tgggatgttt cggaatgggc 300 attgtcgcca attttcagga gttagctgtg ccagtggttc atgacggggg cgctcttttg 360 gcctttgtct gtggtgtcgt gtacacgctc ctacagtcca tcatctctta caaatcatgt 420 ccccagtgga acagtctctc gacatgccac atacggatgg tcatctctgc cgtttcttgc 480 gcagctgtca tccccatgat tgtctgtgct tcactaattt ccataaccaa gctggagtgg 540 aatccaagag aaaaggatta tgtatatcac gtagtgagtg cgatctgtga atggacagtg 600 gcctttggtt ttattttcta cttcctaact ttcatccaag atttccagag tgtcacccta 660 aggatatcca cagaaatcaa tggtgatatt tgaagaaaga agaattcagt ctcactcagt 720 gaatgtcgca ggccatttct aaaagtgcta cagaggacag acagggtttt gaggccaccc 780 tgattattgg gatgcatctg cagcacatcc aggacttgaa tttcattacg agttcctaat 840 agttgtattt ctaaagatgt gtttcctaga gaatgtacag ccttatgaca ctgtagtgat 900 gtttttataa ttttctaagt agatttttt atattaacaa attcatatac agaaaaaatt 960 aggttgttac aaaaaatgga gagctcttat ttttgtacag attctqtcqt tttttttta 1020 tttgtgtgag atttatggaa atacactaaa tgagtaattc aggttcagta catttattac 1080 aaagtgaaat caggggatat tcatttgtaa attttattct tagtgaatga actgtataat 1140 tttttttatc aggagagcac ttataaaatt caatttataa atatcatata cccaaatcat 1200 aaagatttag ttgatacatt aacactaaga tactctgatt tttagccaaa ctaaacaaag 1260 tgcttctact gagaggcctt tataccacca tgtacagtaa ctctaagtga atacggaaga 1320 ecttggtttt gaaattetge cacettgttt etecetgete atgaggtege acettttget 1380 cttgctgcta attgcccatt cgtagtgggt gtaatgccag gtggaatggt ttcaacaagt 1440 caggtgaaaa ccatccttta ttgttgctgg cacaacttga tatatagtct gactcagaac 1500 tgaagctcac atctcaaatt catttcatgc cagtaaatgt ggcaaagaga agaaaggccc 1560 aagagcgaga caagaagaat ggagaagggg gcagccaaga agaacttctg ggttcagggt 1620 actgtttatt tgctccttct cttcatgcct gtggctggat gtcccacaac actataagaa 1680 atataagtca agccctttgt gttaagcaag aactacagac tccatctttt cacccaaatc 1740 atgaatgacc aataaaaagc aagttattcc agaggaagaa gcagcccttg aaatgttaag 1800 gcttaggctt gaaaggtgaa gagcaggaat tctctctttc aaatcctaga gcataaaccc 1860 atgtgtggcc aagtgagatc agccctcaag ggcacatgcc aagggcagag cagcccatgt 1920 agacagette ggagggeatg ggggtgtagg gagttegggg tageteetea ttaactattt 1980 gttgggtgag taaaggggtg aggctcagtg gcaggtacct ctgcaatgac aagctgcctc 2040 ccctctatgt gtttagcata tgttattaga acatgtccga cacccctacc gctgccattt 2100 gggcccttta ataaagccaa gtagagaaat ctggcaataa aaggcaaatg taagcatqct 2160 ttctttaaga cgcatcataa atggttttct ttaagtgaat ggaagagttt gacagagata 2220 cacettigta agaaaacatt aagaatgetg getggetgtg gtggeteaca eetgtattee 2280 cagcactttg ggaggcctag gcaggaggat tgcttgagcc tgggacttcg agaccagact 2340

```
gggaaacatg gcaaaatccc atctctacaa caaaaataca aaaattagcc aagtgcggtg 2400
gtgtgcctgt agtcctagtt acttgggagg ctgaggtggg agaatcacct gagcccagga 2460
g
```

```
<210> 3438
<211> 5925
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (272)...(3795)
<223> similar to gi4589512 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3438 atatcggagg aatcccagaa tatagataca gcttaaattt tgtcttacaa agtcagcact 60 tattggttat tcattgttgc gtgttctcaa aggccctgag tcaactgtct ctactcagtt 120 aaatactatt tggacttgtc ccttatggtt tcaagcacaa ttattacaat atttggggct 180 tacaaaaatt ttatttataa ctagctttta atttaactag atattgtaaa aattggaaat 240 ttggaatatt catttctttg tcctgttgta ggtggcgctc tgttttccga atagtgaccc 300 tgtgatgttc atggatgcat tttatgggtg tctcctggca gagctgggtc ctgtccccat 360 agaagtgcca ttaacaagaa aggatgcagg cagccagcag gttgggtttc tgctgggcag 420 ctgtggagtc ttcttggccc tgaccacaga cgcttgtcag aaaggcctcc ccaaggcaca 480 gacaggagag gtggcagctt tcaaaggttg gcccccgctc tcctggctag tgattgatgg 540 gaagcatcta gccaagcccc caaaggactg gcaccctctg gcccaggaca cagggactgg 600 gactgcctac attgagtata aaaccagcaa agaaqqcagt acqqtqqqqq tcacagtqtc 660 ccacgcatcc ctgctggcac agtgccgggc tctgacccag gcgtgcgggt actcagaagc 720 tgaaacatta acaaacgtgc tggatttcaa aagggatgct ggtctgtggc atggcgtgtt 780 aacaagcgtc atgaacagga tgcacgtggt cagcgtcccc tacgcgctga tgaaggcgaa 840 cccactctcc tggatccaga aagtgtgctt ctataaagct cgggccgcgc tggtgaagtc 900 gcgagacatg cactggtctc tcctagctca gcggggccag agggacgtca gcctcagctc 960 actgcgcatg ctgattgtgg ccgatggtgc caacccgtgg tcgatctcct cctgtgacgc 1020 cttcctcaac gtcttccagt ccagaggtct gaggccagag gtcatctgtc cttgtgcaag 1080 ttctcctgag gcgctgactg tcgccatccg caggccacct gatctgggag gaccacctcc 1140 aagaaaagca gtcctgtcga tgaacggtct aagttatggt gttatcagag tggatactga 1200 agaaaagttg tcagtcctta ctgttcagga cgttggtcag gtgatgcctg gagctaatgt 1260 atgtgttgtg aagttagaag gtacccctta tctttgtaaa actgatgaag tgggagaaat 1320 atgcgtcagt tccagtgcaa ctggcacagc gtactatgga ttgcttggaa tcacgaagaa 1380 tgtgtttgag gcagttccgg tcaccacagg aggagcaccc atctttgaca ggccattcac 1440 caggacagge ctgctggget teategggee tgaceaeetg gtetteateg tgggeaaaet 1500 ggacgggctg atggtcactg gagttcgcag acacaatgca gatgacgttg tggccaccgc 1560 actggccgtg gagcccatga agtttgtcta cagaggcagg atcgctgtgt tctctgtgac 1620 cgtgctgcac gacgaccgga ttgtcctggt ggctgagcag cggccggatg cctcggagga 1680 ggacagette cagtggatga geegtgtget geaggeeatt gatageatee accaggtggg 1740 cgtgtactgt ctggccctgg ttcctgccaa caccttgccc aaggctcctc tcggagggat 1800 tcacatttct gaaaccaaac agcgctttct ggaagggacg ctgcacccgt gtaatgtgct 1860 gatgtgccct cacacctgtg ttaccaacct ccccaaacct cgtcagaaac aaccagaggt 1920 tggaccagcc tcaatgatcg tggggaacct ggttgctggg aagagaatcg ctcaggcttc 1980 cgggagagag ctcgcccacc tggaggacag cgaccaggca cggaagttcc tgttcctggc 2040

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<210> 3439

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actgcactga cattcatttg agttttctct cattatcaga ttctgttcca aacaagtatt
                                                                    5580
ctgtagatcc aaatggatta ccagtgtgct acagacttct tattatagaa cagcattcta
                                                                    5640
ttctacatca aaaatagttt gtgtaagtta gttttggtta ccatctaaaa tatttttaaa
                                                                    5700
tgttctttac ataaaaattt atgttgtgtt ttaaaatcct taggggcttt atctatttt
                                                                    5760
ctaagtcagt taactgtact tctaaaaaaa gtattttgta tctacttttg taacttcgtc
                                                                    5820
agaataaaat atattgaaag caagaaatgg ctgattaaag tatgtatatc aacacaccct
                                                                    5880
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                                                                    5925
```

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<211> 1620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1394)...(606)
<223> similar to gi5360119 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3439 ttttttttt ttaaattaat ttaatttaat ttaatttaaa aaatcatgca agtagaaatg 60 actttttccc ccttttatca ataaaatgct gcccaaaatg actagcttat ttttttttta 120 attgaaccca aaagaagctt ctagtatgga gcaagtctgg tggaaaagca gcatatctcc 180 caggagagaa gggaaacgga gcagggccaa tcatcaggtg acagtgcagt gctactcatc 240 accatcatga aaaactcatg agcgtcagac gcgccacagg gattcctgat caggtaatat 300 ctgctattat tatgacaagc tccatagaaa aatgtagaca gcagggcaga aagacattat 360 tctttataaa taaaaggttc atctgtgcaa tattgacatt agaaaaatat acattgcttg 420 ccatagacct tctctggata aaatcagacg aatctaggat ctgactccac ttcactgtga 480 gggctctggc tccacggtga cgaccgactc cacagcttct agaggaactc cttctagcgg 540 gcccatccgc aggcacgccc ctctgcatca gtcactgtga caatgtcctc ctcctgagac 600 actattgtac ctggagggga caagataagc ccatcggaag tctgaataaa aatctgcttc 660 tgtccctgag acagtaactc atggctccca ttggaaattt caaaagccat ggcttcgcca 720 acagcaacca cgctctccag ttctctctgg ccagagtgca cctccatccc acaggggaac 780 cggttcaagt cccccgaaag gcttctgaga cacccttcag tcaatagtga tccatgtggg 840 ccaggctgag gccctggctt gggcacagtc ctgtaggcac agtccactgc cacgctatcc 900 acagacaaaa ttttctcaag cggaggggct gccacctctg taggcaggac gctggtgggg 960 ctgggctgct ggtggttcag gtggaagtca caaaccttgc cgaggtgtcc tgcctctgca 1020 tgtccaggcc ccccaggcgg cagggactct gctccaccac cagatgacaa agggctgcag 1080 aaacccgggc tecteagget gteecaggtg teetggtetg aagagtgtte caaagcatte 1140 tetecaggaa aegetgeeae etgtgeetgg gteageetee taggetetee tgaetgagea 1200 taaacaggca gcccactgac atcccgggat gagagagcag cacctataga ccccctcctg 1260 gcttctaagt tagccagtgc ctgaagctgc gggcccgcct ggaacacgct cccattgcca 1320 ccagaaaccg tcgttgtatg gctttcttca gaacggggag agacagtcac atttactgga 1380 ggggaaaaac ctaaacattt tgggaaacag gtgaacatgg cgtgtactgt gtcatggccc 1440 actcactgca ctcaccaccc aaaaccagct aggccaagtc acctgccctg cagaaaagtc 1500 aaagcatcga tgctccttgc tccttgggat tggtagcaat tttaaaaaat acgtccctat 1560 1620

```
<210> 3440
<211> 4487
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(3896)
<223> similar to gi5931959 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3440 gccgggtcga cgatttcgtc cgagtacctc acgcaagatg gcggagctgg aggaggtgac 60 tctggacggg aagcctcttc aggcgctgcg ggtgaccgac ctgaaggccg cactggagca 120 gcgaggccta gccaagagcg ggcagaagag tgccctggtc aagcggctca aaggggctct 180 aatgctagaa aatttacaga aacactcaac accccatgct gcattccagc caaattccca 240 gattggtgag gaaatgagcc agaacagttt cataaaacag tatctggaaa agcagcagga 300 gctacttagg cagcgtctgg aacgtgaagc tcgagaagct gcagaacttg aagaagcttc 360 agctgagtcg gaggacgaga tgatccatcc tgagggagtg gcttccctgc tgcctcctga 420 ctttcagagc agcctggaga gaccagagct ggagctcagc agacattcgc ccagaaaaag 480 ctcctcaatt tctgaagaga aaggtgactc tgatgatgag aaaccaagga aaggagaaag 540 acgatcatct agggtcagac aggcaagagc agctaaactg tctgagggca gccaacctgc 600 tgaggaggaa gaggatcaag aaacaccttc cagaaaccta agggtcagag cagatcgaaa 660 720 ggaaggtgat gatgagggac aaaaatctag ggaggcacca atcctgaaag agtttaagga 780 agaaggggaa gagataccta gagtaaaacc agaggagatg atggatgaga gacccaaaac 840 aagatcccag gaacaggagg tgttagagag aggagggaga tttacaagat cccaggaaga 900 ggctagaaaa agtcatctgg ccagacagca gcaggagaag gaaatgaaaa caacatctcc 960 ccttgaggag gaagaaagag aaataaaatc ttcacaaggc ttaaaggaaa aatcgaagtc 1020 teetteeeet eetegaetga etgaagateg aaagaaggee teaettgtag egetgeeaga 1080 gcaaactgcc agcgaggagg agactcctcc acctttacta acaaaggaag catcttctcc 1140 accacctcat ccacagetee atagegaaga agaaatagag cecatggaag geccageeee 1200 ccctgtcctc attcagttat ctcctcctaa tacagatgct gacaccaggg agctattagt 1260 atctcagcat actgtccagt tggtaggagg cctgtctcct ttgtcaagtc cttcagacac 1320 caaagcagaa tctccagcag agaaagtgcc agaggagagt gtcctgcctc tggttcagaa 1380 aagcacactg gctgactact cagcccagaa ggatcttgaa cctgagtcag acagatctgc 1440 tcagcccctc cctctaaaaa ttgaggaatt agcactggcc aaaggaatca ctgaagaatg 1500 tctgaaccag ccatctttgg aacagaagga aggcagaaga gcttctcata cccttctccc 1560 aagccacaga ttgaaacagt cagctgattc atcctctagc cggtcctcct catcttcctc 1620 ctccagttct agatcaagat ctcgctctcc tgacagttca ggttctcggt ctcattcacc 1680 geteagatee aageagagag atgtageeea ggeaegtaet eatgeeaaee etegtggtag 1740 acccaagatg ggctccagat caacatcaga gtccagatca aggtcacgtt cacgttcacg 1800 ttetegttea geateaagea acageagaaa atetetgage eetggagtet eeagggaeag 1860 cagcaccage tatactgaaa ccaaagatee etettetggt caggaggttg caactecace 1920 agtgccacaa ctgcaggtct gtgagccaaa ggagaggact tccacctcct catcctctqt 1980 ccaagcaagg cgtctgagtc agcctgaatc agctgaaaag catgtgaccc agaggttaca 2040 gcctgagcgg gggagcccaa agaagtgtga agctgaagag gcagagccac cagctgccac 2100 acagceccaa aceteagaga eteagacete teatetgeca gaateagaaa gaatteatea 2160 cactgttgag gagaaggagg aagtgaccat ggacacaagt gaaaacagac ctgaaaatga 2220 tgttccagaa ceteccatge etattgeaga ceaagteage aatgatgace geeeggaggg 2280 cagtgttgaa gatgaggaga agaaagagag ctcgctgccc aaatcattca agaggaagat 2340

```
ctccgttgtc tcagctacca agggggtgcc agctggaaac agtgacacag aggggggcca
                                                                     2400
gcctggtcgg aaacgacgct ggggagccag cacagcccac cacacagaag aaaccttcca
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tcagtatcac cactgaatca ctaaagagcc tcatccccga catcaaaccc ctggcggggc
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aggaggctgt tgtggatctt catgctgatg actctcgcat ctctgaggat gagacagagc
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gtaatggcga tgatgggacc catgacaagg ggctgaaaat atgccggaca gtcactcagg
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                                                                     2700
ctgaagcaga acctcctgta cctccccagg tgtcagtaga ggtggccttg ccccacctg
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cagagcatga agtaaagaaa gtgactttag gagatacctt aactcgacgt tccatttgcc
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ccccaccccg gggcaagatt agcaacattg tccatatctc caatttggtc cgtcctttca
                                                                     2940
ctttaggcca gctaaaggag tggttggggc gcacagaaac cttggtgaaa gaggcctctg
                                                                     3000
ggattgccaa gatcaaatct cattgctttg taacgtactc aacagtagag gaagctgttg
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ccacccgcac agetetgcac ggggtcaaat ggccccagte caateccaaa tteetttgtg
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aacagtgggc agaacgggaa cggcaaatgg agcggcggga gcggactcga tcaqaqcgtg
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gccgcaagga acgtgcgaag tctaaagaaa agaagagtga gaagaaagag aaagcccagg
                                                                    3480
aggaaccacc tgccaagctg ctggatgacc ttttccgaaa gaccaaggca gctccctgca
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tctattggct cccactgact gacagccaga tcgttcagaa agaggcagag cgggccgaac
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gggccaagga gcgggagaag cggcgaaagg agcaagaaga agaagagcaa aaggagcggg
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agaaggaagc cgagcgggaa cggaaccgac agctggagcg agagaaacgt cgggagcaca
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gtcgggagag ggacagggag agagagagag aaagggagcg ggacaggggg gaccgagatc
                                                                    3780
gggataggga aagggaccga gaacgaggca gggaaaggga tcgcagggac accaagcgcc
                                                                     3840
acagcagaag ccggagtcgg agcacacctg tgcgggaccg gggtgggcgc cgctagctgg
                                                                     3900
gaaaacacta gagctgcagg taccagccac tcggccccag ggggttatgg ccacagaggg
                                                                    3960
ataggcacag tetecaceae cetggageea agggtettte acateaceta tecetacata
                                                                    4020
cataccaaat ggaaaagtgg ccatcctttt ccccccaaac acaccccctt aacctatctc
                                                                     4080
ttgggactta gcccgaccct ccctctcatt tcccattaag tctgagaggc aagagctagg
                                                                    4140
ttaggcaagg aggtggttgg ccagagatgg ggaacagcca ggtgccccag tcctctgatt
                                                                    4200
tttcctccat cctgcttacc acctccctgg gtacttacag ccttctcttg ggaacagccg
                                                                    4260
gggccaggac tgggtcacct atgagctgaa tcagcatctc ctcctgagtc ccagggcccc
                                                                    4320
tgcagttccc agtctcttct gtcctgcagc ccttgcctct ttcccacagg ttccacttta
                                                                    4380
tatccacctt ttccttttgt tcaattttta ttttatttt ttttattatt aaatgatgtg
                                                                    4440
gtctatggaa aaaaaaataa aaatctgact tagttttaaa aaaaaaa
                                                                    4487
```

```
<210> 3441
<211> 1969
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (55)...(1179)
<223> similar to gi4972746 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3441
tgaaaagttt gccaaactgt cgttgatgtg ggagagaaaa cgtcagagtt caaggccaaa 60

```
ggctacttag ctctggggct cacgtacagt ctgcaggcca ctgacgcttc tttqcqaqqq
                                                                    120
atgcaggagg tcctacagag aaaggcgctt cttgcatttc agagggccca cagcctgtca
                                                                    180
cccacagate accaageage tttctacetg getetgeage ttgccatete cagacagate
                                                                    240
ccagaggete tggggtatgt ccgccaaget cttcagette aaggtgacga tgccaactee
                                                                    300
ctgcacctcc ttgccctcct gctgtcagca cagaagcatt accatgacgc tctgaacatc
                                                                    360
atcgacatgg ccctgagtga atacccagaa aatttcatac tactgttttc caaagtgaag
                                                                    420
ttgcagtcac tctgccgagg cccggacgag gcactgctga cttgtaagca catgctgcag
                                                                    480
atatggaaat cctgctacaa cctcaccaac cccagtgatt ctggacgtqq gaqcagcctc
                                                                    540
ttagatagaa ccattgctga cagacgacag cttaatacaa ttactttgcc agacttcagc
                                                                    600
gatcccgaga caggctccgt ccatgccaca tcggtagcag cctcaagagt ggagcaggca
                                                                    660
ctqtcggaag tggcttcgtc tctgcagagc agtgccccta agcagggccc gctgcacccc
                                                                    720
tggatgacgc tggcacagat ctggctccat gcagctgaag tctatatcgg catcgggaag
                                                                    780
cctgcagaag ccacagcctg tacccaagaa gctgccaacc tcttcccaat gttcccacaa
                                                                    840
tgtcctctac atgcgcggcc agattgctga gctccgggga agcatggacg aggcgcggcg
                                                                    900
ggggtatgaa gaggccttag ccatcagccc cacccacgtg aagagcatgc agcgactggc
                                                                    960
cctgatcctt caccagctag gccgctacag tctggcggag aagatcctcc gggacgcggt
                                                                   1020
gcaggtgaac tcgacagccc acgaggtctg gaacgggctg ggcgaggtcc tccaagctca
                                                                   1080
gggcaacgat gcggcggcta cggagtgctt cctgacagcc ttggagctgg aggccagcag
                                                                   1140
eccegeegtg ceetteacea teateceeeg egtgetetga geaggegeet geeageetea
                                                                   1200
cctgccgctc aggcctcaga ggccctgccg ggcaccaggg cttgtgccat cgccccaagg
                                                                   1260
ggatgaatct gccgcactga ggccagggac gagtgttcag tgggccacag tgaaccaacc
                                                                   1320
aaaccaaccc cgaatcatcg ctctcgccat gtgcgtttct cttgtttttt ttgccagccc
                                                                   1380
aatggtagtt tctgaaccta ttgacattgt tcaaaatgga tcatgtgcca tattttgtta
                                                                   1440
gttgacatct gagttttcag taaaatgatt atggaattaa tcagcaaatg tagaagaata
                                                                   1500
tattcaaagt taaaattcag tggcagcaca gattattttt atcagagctg taaagaaaac
                                                                   1560
aactgtcctt ttctccccac caccctcct gccccacttt ggcccagaaa ccaaatgtga
                                                                   1620
acttcctgtc tcccacctca gcactagtcc atgccaggac accagctgac aatttcttgg
                                                                   1680
ttttactgtc aataattgta ccatgtgatc aattactgtc ctcacttaga acaaagcctg
                                                                   1740
agtccgagaa tatttatatt ttaccaatat atgcctgtta caagagaagg aaatatgagt
                                                                   1800
tatttaagtt taacttttt atgtgaattc agagtttatt tatcgaggga aatatgtaca
                                                                   1860
aagaagcttc aaatggaata tttaccgaca ttccttatac atgacagaca cttggctaca
                                                                   1920
1969
```

```
<210> 3442
<211> 2263
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2228)...(668)
<223> similar to gi3879811 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3442
ttttttttt ttgctcttta aatttgctct tttaattgca ttaaataaat ccatttcatt 60
gttttacttt ctgggaaaag ggttaaactt caaatactg aaatactttt catttatacc 120
aggtcaagaa aaatgccaca gccagaaaaa tttattttaa aatagaaaca tacattaagc 180
tttaaaacaa ccaactctca aactgaaaga ggaaagagcc tttgatccca gagtccatgc 240
ggaatgaatt ccatacggtg tttgaaattc acataaggag cacttaggaa aaccacctga 300
```

```
aatgggaaat ccaacaggcc cccttggcct gtgagggctt cccacccctg gcccgtgtga
                                                                      360
gggacatggg ccgaaccccg ggacactcgt gtgccgggag gccaccacag ctcaaggtga
                                                                      420
ccgggcagca cccagctctg tgaccaagac agatgttcac acgtgggggc atcgtaagcg
                                                                      480
ctaccagete caaatetgae gtgatgggaa ettgggagat gtetgagaaa tgteegaagg
                                                                      540
gattttggca acacagaaaa cgcaatgtct aggaattcct ccaaatgctt ccaaaaatac
                                                                      600
tcattgacaa ttcaagttgc acttggctgg cggcagcccg ggcggccttc agtccgtgtg
                                                                      660
gggcgcccgc gtggccttct cctcgtagga ctccccaaac tcgttcactc tgcgtttatc
                                                                      720
cacaggataa agccaccgct ggtacaggta gaccagaaac accacgtcgt cccggaagca
                                                                      780
ggccagccgg tgagacgtgg gcatggtgat gatgaaggca aagacgtcat caatgaaggt
                                                                      840
gttgaaagcc ttgtaggtga aggccttcca gggcagatgt gccactgact tcaacttgta
                                                                      900
gttcacaaag agctggggca gcatgaagag gaaaccaaag gcatagaccc cgttgacgaa
                                                                      960
gctgttgatt aaccaggagt accagctctt atatttgata ttcaggagtg aatagacagc
                                                                     1020
acccccgaca cagagagggt acagcaggta tgacaagtac ttcatggcct gagtatcgta
                                                                     1080
ctcctcggtt ttcctctcag attcgctgta agtgccaaac tgaaattcgg gcatcaggcc
                                                                     1140
tctccaaaaa atagtcatct tcaatgcctt cttcactttc cacagctcaa tggcggctcc
                                                                     1200
aacacccgcc gggaccagca ccagcaggct cgtctgctcg tccagcagga acagaaagat
                                                                     1260
gaccacggtg ctgaagcagc gccagagcac tgccttggtg gacatgccga tcatgctctt
                                                                     1320
cttcttcttc cagaaactga tgtcattttt aaaggccagg aaatcaaaga gaagatggaa
                                                                     1380
cgctgcgaca aagaaggtca gcgccaggaa gtataagttg gtatctacaa aaattccttt
                                                                     1440
cacctcatca gcatctttct ctgaaaaccc gaactgctgc agggagtaca cggcgtcctg
                                                                     1500
catgtggatc cagaagcgca gccgccccag tgagaccttg tcgtaggaca cggtgagggg
                                                                     1560
cagctcggtg gtggagcggt ttatgaccat caggtccttc acgcggttgc tgagctggtc
                                                                     1620
gatgaacagg atgggcaggt aatgcacggt tttccccagc tggatcatct tcatgtaccg
                                                                     1680
atgcacatcg gcaggcaggg aggacccgtc aaagacaaag ttgtccgcca tcacqttcag
                                                                     1740
cgccagccgc ggtcgccagt gggacactgg ctcatccagg gcactcgtcg gcttcttgtc
                                                                     1800
cgcctcgatc tgctgtgtat cagactcccc ggtgagcagg ttgatttctt ctggcttggg
                                                                     1860
gaccatgtag gtggtcagag gactgaccag gtgcacctgc ttcccgtcgt gccacggcag
                                                                     1920
gaccccagcg tgatggagga agatgtaggc atacagcgtc ccattgtttc tcgttttctt
                                                                     1980
tggtacagaa acattaactg tcctttcaaa tttggactcc acatcaaagt cttccacatt
                                                                     2040
caagaccagg tcgatgttgt tctcagcacc caggtgggac ctcgtcgtgg tgaaggagtg
                                                                     2100
cgctcagctg cagcttgggc cgccgcgcca ggtagggctg gatgcagctt gcgtcgccgg
                                                                     2160
agcacgggcg ggtgtagacg atgccgtaca tgacccagca ggtgtgcacc acgtagacca
                                                                     2220
cgaacacgcc gcaccaccaa gctggtgaag gagctgcggc cgc
                                                                     2263
```

```
<210> 3443
<211> 1878
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1307)
<223> similar to gi4510377 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3443
gtatctcatg ctaatgctct acaaaggaaa ggccgagcag gccgtgttgc atctggggtc 60
tgcttccatt tattcactag ccatcactac aatcaccagc ttttaaaaca acagctacca 120
gaaatacaaa gagtgccatt ggaacagctg tgtctaagaa ttaaaatttt agagatgttt 180
agtgctcata atctccagtc tgtgttctct cggctcattg aacctccaca caccgattct 240
```

```
cttcgtgcct caaaaatacg attacgagac ttaggagcat taactccaga tgaaagattg
                                                                      300
acccctcttg ggtatcattt ggcctctctg cccgtggatg tgagaattgg caaactaatg
                                                                      360
ttgtttgggt ctatcttccg ctgtttggat cctgctctca ccattgctgc cagtttggct
                                                                      420
tttaagtcgc cgtttgtatc tccctgggat aaaaaagaag aagctaacca gaaaaagctg
                                                                      480
gaatttgcat tcgcaaacag tgattatctg gcccttctac aagcgtataa gggatggcag
                                                                      540
ctaagtacaa aagaaggcgt gcgtgcaagt tataattact gcagacaaaa cttcttgtct
                                                                      600
ggaagagttc tgcaggaaat ggccagcctc aaacgacaat tcacggaact gttatcggat
                                                                      660
atagggtttg caagggaagg gctcagagca agggaaattg agaaaagggc ccaaggagga
                                                                      720
gatggtgtct tagatgccac aggagaagag gcaaactcaa atgctgagaa ccccaagctg
                                                                      780
atatcagcaa tgctgtgtgc ctgctttgta tccaaatgta gtgcaggtga aaagcccaga
                                                                      840
aggaaaattt cagaagacca gtactggagc tgtcagaatg caaccaaaat cagctgagtt
                                                                      900
gaagtttgtc accaagaacg atggatatgt acacattcac ccttcatcag tgaactatca
                                                                      960
ggtgagacac tttgacagcc cctacctgtt gtaccacgag aagataaaaa ctagtcgagt
                                                                     1020
attcatccga gactgcagca tggtgtctgt gtacccgctg gtcttgtttg gaggaggcca
                                                                     1080
agtgaatgtg cagcttcaaa gaggagagtt cgttgtctcc ctggatgatg gttggatccg
                                                                     1140
ttttgtagct gcttcccatc aggtggctga actggtaaag gagcttcgtt gcgaacttga
                                                                     1200
tcagcttctc caggataaaa ttaaaaaccc aagcattgat ctgtgtacgt gtcctcgagg
                                                                     1260
atcccggatc atcagcacaa ttgtgaaact tgtcaccaca caataaaaag cagtcttaga
                                                                     1320
gagtgcttgc tactcacctg cttctagctc acctgggaaa taacagcaga acctctacct
                                                                     1380
cgaactaaag acctattggg gctggccctg gtggaggagc ccagggcatg aagcccaagg
                                                                     1440
cagctgaggc agtgtatata cccttagggc catttctaac aaagccttgg ccactcccag
                                                                     1500
cacaatttgg agtgtcaagg gtgagagcct aaaacccagc ttgcctgtct ttgtctctgt
                                                                     1560
gattgttctg gagtgaatta agttcacctg ataactcaaa agtgaatgta taatacaatt
                                                                     1620
ctgttttaat ctgtgtattc tttttctcct actttttact ggggtgagag gggcatgaag
                                                                     1680
agaaatacgc ctttttttt ttttttcct gtcgccaagg ctcgactgag agaagtcaaa
                                                                     1740
acagagaagg ggaaaaaaaa cccaaaatta tgtgaacaag caaaattaaa atttcatttt
                                                                     1800
aggettattg gettactgag taaacttgae ttgtgagggg tttttatttt tacteattaa
                                                                     1860
aagtcaacaa aaaaaaaa
                                                                     1878
     <210> 3444
     <211> 6436
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(5017)
     <223> similar to gi180803 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3444
atggggcccc ggctcagcgt ctggctgctg ctgctgcccg ccgcccttct gctccacgag
                                                                       60
gagcacagee gggeegetge gaagggtgge tgtgetgget etggetgtgg caaatgtgae
                                                                      120
```

```
400> 3444
atggggccc ggctcagcgt ctggctgctg ctgctgcccg ccgcccttct gctcacgag 60
gagcacagcc gggccgctgc gaagggtggc tgtgctggct ctggctgtgg caaatgtgac 120
tgccatggag tgaagggaca aaagggtgaa agaggcctcc cggggttaca aggtgtcatt 180
gggtttcctg gaatgcaagg acctgagggg ccaccagggac caccaggaca aaagggtgat 240
actggagaac caggactacc tggaacaaaa gggacaagag gacctccggg agcatctggc 300
taccctggaa acccaggact tcccggaatt cctggccaag acggcccgcc aggccccca 360
ggtattccag gatgcaatgg cacaaagggg gagagagggc cgctcgggcc tcctggcttg 420
cctggtttcg ctggaaatcc cggaccacca ggcttaccag ggatgaaggg tgatccaggt 480
gagatacttg gccatgtgcc cgggatgctg ttgaaaggtg aaagaggatt tcccggaatc 540
```

```
ccagggactc caggcccacc aggactgcca gggcttcaag gtcctgttgg gcctccagga
                                                                      600
tttaccggac caccaggtcc cccaggccct cccggccctc caggtgaaaa gggacaaatg
                                                                      660
ggcttaagtt ttcaaggacc aaaggtgac aagggtgacc aaggggtcag tgggcctcca
                                                                      720
ggagtaccag gacaagctca agttcaagaa aaaggagact tcgccaccaa gggagaaaag
                                                                      780
ggccaaaaag gtgaacctgg atttcagggg atgccagggg tcggagagaa aggtgaaccc
                                                                      840
ggaaaaccag gacccagagg caaacccgga aaagatggtg acaaagggga aaaagggagt
                                                                      900
eccggtttte etggtgaace egggtaecea ggaeteatag geegeeaggg eccegeaggg
                                                                      960
agaaaagggt gaagcaggtc ctcctggccc acctggaatt gttataggca caggaccttt
                                                                     1020
gggagaaaaa ggagagagg gctaccctgg aactccgggg ccaagaggag agccaggccc
                                                                     1080
aaaaggtttc ccaggactac caggccaacc cggacctcca ggccttcctg tacctgggca
                                                                     1140
ggctggtgcc cctggcttcc ctggtgaaag aggagaaaaa ggtgaccgag gatttcctgg
                                                                     1200
tacatctctg ccaggaccaa gtggaagaga tgggctcccg ggtcctcctg gttcccccgg
                                                                     1260
gccccctgga cagcctggct acacaaatgg aattgtggaa tgtcagcccg gacctccagg
                                                                     1320
tgaccagggt cctcctggaa ttccagggca gccaggattt ataggcgaaa ttggagagaa
                                                                     1380
aggtcaaaaa ggagagagtt gcctcatctg tgatatagac ggatatcggg ggcctcccgg
                                                                     1440
gccacaggga cccccgggag aaataggttt cccagggcag ccaggggcca agggcgacag
                                                                     1500
aggtttgcct ggcagagatg gggttgcagg agtgccaggc cctcaaggta caccagggct
                                                                     1560
gataggccag ccaggagcca agggggagcc tggtgagttt tatttcgact tgcggctcaa
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aggtgacaaa ggagacccag gctttccagg acagcccggc atgccaggga gagcgggttc
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tcctggaaga gatggccatc cgggtcttcc tggccccaag ggctcgccgg gttctgtagg
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attgaaagga gagcgtggcc cccctggagg agttggattc ccaggcagtc gtggtgacac
                                                                     1800
cggcccccct gggcccccag gatatggtcc tgctggtccc attggtgaca aaggacaagc
                                                                     1860
aggettteet ggaggeeetg gateeecagg eetgeeaggt eeaaagggtg aaceaggaaa
                                                                     1920
aattgtteet ttaecaggee eeectggage agaaggaetg eeggggteee eaggetteee
                                                                     1980
aggtccccaa ggagaccgag gctttcccgg aaccccagga agggccaggc ctggccagga
                                                                     2040
gagaagggcg ctgttgggcc agccaggcat tggatttcca gggccccccg gccccaaagg
                                                                     2100
tgttgacggc ttacctggag acatggggcc accggggact ccaggtcgcc cgggatttaa
                                                                     2160
tggcttacct gggaacccag gtgtgcaggg ccagaaggga gagcctggag ttggtctacc
                                                                     2220
gggactcaaa ggtttgccag gtcttcccgg cattcctggc acacccgggg agaaggggag
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cattggggta ccaggcgttc ctggagaaca tggagcgatc ggaccccctg ggcttcaggg
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gatcagaggt gaaccgggac ctcctggatt gccaggctcc gtggggtctc caggagttcc
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aggaataggc ccccctggag ctaggggtcc ccctggagga cagggaccac cggggttgtc
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aggccctcct ggaataaaag gagagaaggg tttccccgga ttccctggac tggacatgcc
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gggccctaaa ggagataaag gggctcaagg actccctggc ataacgggac agtcggggct
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ccctggcctt cctggacagc agggggctcc tgggattcct gggtttccag gttccaaggg
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agaaatgggc gtcatgggga cccccgggca gccgggctca ccaggaccat ggggtgctcc
                                                                     2700
tggattaccg ggtgaaaaag gggacccatg gctttccggg ctcctcagga cccaggggag
                                                                     2760
accetggett gaaaggtgat aagggggatg teggteteee tggeaageet ggeteeatgg
                                                                     2820
ataaggtgta catgggcagc atgaagggcc agaaaggaga ccaaggagag aaaggacaaa
                                                                     2880
ttggaccaat tggtgagaag ggatcccgag gagaccctgg gaccccagga gtgcctggaa
                                                                     2940
aggacgggca ggcaggacag cctgggcagc caggacctaa aggtgatcca ggtataagtg
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gaaccccagg tgctccagga cttccgggac caaaaggatc tgttggtgga atgggcttgc
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caggaacacc tggagagaaa ggtgtgcctg gcatccctgg cccacaaggt tcacctggct
                                                                     3120
tacctggaga caaaggtgca aaaggagaga aagggcaggc aggcccacct ggcataggca
                                                                     3180
tcccagggct gcgaggtgaa aagggagatc aagggatagc gggtttccca ggaagccctg
                                                                     3240
gagagaaggg agaaaaagga agcattggga tcccaggaat gccagggtcc ccaggcctta
                                                                     3300
aagggtetee egggagtgtt ggetateeag gaagteetgg getaeetgga gaaaaaggtg
                                                                     3360
acaaaggcct cccaggattg gatggcatcc ctggtgtcaa aggagaagca ggtcttcctg
                                                                     3420
ggactcctgg ccccacaggc ccagctggcc agaaagggga gccaggcagt gatggaatcc
                                                                     3480
cggggtcagc aggagagaag ggtgaaccag gtctaccagg aagaggattc ccagggtttc
                                                                     3540
caggggccaa aggagacaaa ggttcaaagg gtgaggtggg tttcccagga ttagccggga
                                                                     3600
gcccaggaat tcctggatcc aaaggagagc aaggattcat gggtcctccg gggccccagg
                                                                     3660
gacagccggg gttaccggga tccccaggcc atgccacgga ggggcccaaa ggagaccgcg
                                                                     3720
gacctcaggg ccagcctggc ctgccaggac ttccgggacc catggggcct ccagggcttc
                                                                     3780
ctgggattga tggagttaaa ggtgacaaag gaaatccagg ctggccagga gcacccggtg
                                                                     3840
teccagggee caagggagae eetggattee agggeatgee tggtattggt ggeteteeag
                                                                     3900
gaatcacagg ctctaagggt gatatggggc ctccaggagt tccaggattt caaggtccaa
                                                                     3960
```

```
aaggtcttcc tggcctccag ggaattaaag gtgatcaagg cgatcaaggc gtcccgggag
                                                                     4020
ctaaaggtct cccgggtcct cctggccccc caggtcctta cgacatcatc aaaggggagc
                                                                     4080
ccgggctccc tggtcctgag ggccccccag ggctgaaagg gcttcaggga ctgccaggcc
                                                                     4140
cgaaaggcca gcaaggtgtt acaggattgg tgggtatacc tggacctcca qqtattcctq
                                                                     4200
ggtttgacgg tgcccctggc cagaaaggag agatgggacc tgccgggcct actggtccaa
                                                                     4260
gaggatttcc aggtccacca ggccccgatg ggttgccagg atccatgggg cccccaggca
                                                                     4320
ccccatctgt tgatcacggc ttccttgtga ccaggcatag tcaaacaata gatgacccac
                                                                     4380
agtgtccttc tgggaccaaa attctttacc acgggtactc tttgctctac gtgcaaggca
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atgaacgggc ccatggccag gacttgggca cggccggcag ctgcctgcgc aagttcaqca
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caatgccctt cctgttctgc aatattaaca acgtgtgcaa ctttgcatca cgaaatgact
                                                                     4560
actcgtactg gctgtccacc cctgagccca tgcccatgtc aatggcaccc atcacggggg
                                                                     4620
aaaacataag accatttatt agtaggtgtg ctgtgtgtga ggcgcctgcc atggtgatgg
                                                                     4680
ccgtgcacag ccagaccatt cagatcccac cgtgccccag cgggtggtcc tcgctgtgga
                                                                     4740
teggetacte ttttgtgatg cacaccageg etggtgeaga aggetetgge caageeetgg
                                                                     4800
cgtcccccgg ctcctgcctg gaggagttta gaagtgcgcc attcatcgag tgtcacggcc
                                                                     4860
gtgggacctg caattactac gcaaacgctt acagcttttg gctcgccacc atagagaga
                                                                     4920
gcgagatgtt caagaagcct acgccgtcca ccttgaaggc aggggagctg cgcacgcacg
                                                                     4980
teageegetg ceaagtetgt atgagaagaa cataatgaag cetgaeteag etaatgteae
                                                                     5040
aacatggtgc tacttcttct tctttttgtt aacagcaacg aaccctagaa atatatcctg
                                                                     5100
tgtacctcac tgtccaatat gaaaaccgta aagtgcctta taggaatttg cgtaactaac
                                                                     5160
acaccctgct tcattgacct ctacttgctg aaggagaaaa agacagcgat aagctttcaa
                                                                     5220
tagtggcata ccaaatggca cttttgatga aataaaatat caatattttc tgcaatccaa
                                                                     5280
tgcactgatg tgtgaagtga gaactccatc agaaaaccaa agggtgctag gaggtgtggg
                                                                     5340
tgccttccat actgtttgcc cattttcatt cttgtattat aattaatttt ctaccccag
                                                                     5400
agataaatgt ttgtttatat cactgtctag ctgtttcaaa atttaggtcc cttggtctgt
                                                                     5460
acaaataata gcaatgtaaa aatggttttt tgaacctcca aatggaatta cagactcagt
                                                                     5520
agccatatct tccaaccccc cagtataaat ttctgtcttt ctgctatgtg tggtactttg
                                                                     5580
cagctgcttt tgcagaaatc acaattttcc tgtggaataa agatggtcca aaaatagtca
                                                                     5640
aaaattaaat atatatat attagtaatt tatatagatg tcagcaatta ggcagatcaa
                                                                     5700
ggtttagttt aacttccact gttaaaataa agcttacata gttttcttcc tttgaaagac
                                                                     5760
tgtgctgtcc tttaacatag gtttttaaag actaggatat tgaatgtgaa acatccgttt
                                                                     5820
tcattgttca cttctaaacc aaaaattatg tgttgccaaa accaaaccca ggttcatgaa
                                                                     5880
tatggtgtct attatagtga aacatgtact ttgagcttat tgtttttatt ctgtattaaa
                                                                     5940
tattttcagg gatgttttca gggttttaaa cactaatcac aaactgaatg acttgacttc
                                                                     6000
aaaagcaaca accttaaagg ccgtcatttc attagtattc ctcattctgc atcctggctt
                                                                     6060
gaaaaacagc tctgttgaat cacagtatca gtattttcac acgtaagcac attcgggcca
                                                                     6120
tttccgtggt ttctcatgag ctgtgttcac agacctcagc agggcatcgc atggaccgca
                                                                     6180
ggagggcaga ttcggaccac taggcctgaa atgacatttc actaaaagtc tccaaaacat
                                                                     6240
ttctaagact actaaggcct tttatgtaat ttctttaaat gtgtatttct taagaattca
                                                                     6300
aatttgtaat aaaactattt gtataaaaat taagctttta ttaatttgtt gctagtattg
                                                                     6360
ccacagacgc attaaaagaa acttactgca caagctgcta ataaatttgt aagctttgca
                                                                     6420
taccttaaaa aaaaaa
                                                                     6436
```

```
<210> 3445
<211> 1709
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1712)...(288)
<223> similar to gi2988400 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 3446

```
<400> 3445
ttttttttt ttactatgct tgaactttag gcatttattg tataaactta tacatgccat
                                                                       60
ataaacaaac taaactcttt tagctgctat accaagtttc cataaaactg tctgctggtt
                                                                      120
ggggaggcta cagcctgacc acattctttg ccattgccta caaggggtaa gaaatggcac
                                                                      180
atggaaacat ggcaggccga ctcacgaaca caggcctggg ccagcgcttt cttcttcctc
                                                                      240
ttttattccc atcagtccta gaccagagag tgaaccatga gtgctcttgg ttcctggcag
                                                                      300
caggatgagg cagagagtgc ccgggcacaa gctgttgtag agctttccaa tcttccqqct
                                                                      360
ccagcgccag gctgctatct tcgggtggtc cagtttcaga gtctgcaagg cctcctgttc
                                                                      420
aaagggggga ggtacaacac gaagccctgg gagccttgtt gattcaggtg gtaagcctct
                                                                      480
gagccaggcc atggaggtgc cctgggggtt agggcatgcc tgcctttcag cttccagtcc
                                                                      540
ttgcctgtga gaatgttgag ggcctgctgg gcactgccaa aacttttgaa tttcaggaaa
                                                                      600
acagtatttt ttctgctttc cacttttaag atctttaggc aagatcacag cttccaggcc
                                                                      660
aagaaagagg cggggctcct gcaatagctg ttctttgaag gtttcactca ctccagacag
                                                                      720
atatatagag ccttggtttt cagaatctcc ttccagctca ttcacgaggg tgtcacaatc
                                                                      780
aagcgtgagc tctgtcacag gcctctgcac cttgatgcag ataccatcta ccagaatacc
                                                                      840
atccaaggac tctatggcca gctgggcagc ttctaggact tcatactgta tacagagatg
                                                                      900
aggctgacgg gtttcaagaa caaaagtcat tgactggact gggccaaagc ttttaaacag
                                                                      960
cctcttcaga gccctgagat tgcaattttt gctaaatggc ccagcataga cagttgatat
                                                                     1020
ctctgtccac ttgatcctca tccttttgtt catctcctca gtgaggacag gtgaaaaggc
                                                                     1080
cttaaaagag aactgaacaa tgctgaaggg aaacaggggg atttccactc tggcctgctc
                                                                     1140
aagaacctct ttatttgaaa gacacttaat agtttgacaa tttctggaag atggaagttc
                                                                     1200
accagcatet gteteceggg teaaaaaaag aagettetga eecactgaat eeaageatte
                                                                     1260
taaaacactt gtgtttgggt gctgaagtac ttctgctgtg tttttaggct cttggcctgc
                                                                     1320
tgcttgtatt tcttggtgat tagctagtgc ttctagattt agttctgcaa tcttttttgg
                                                                     1380
gccatgctta aggaaatacc gagccaattc aaggattgtt ctagcatctt ctgtggcatc
                                                                     1440
atgaccaagt ctgtctggac actgtatatc cttccccaaa ataactttgg ctaagaactt
                                                                     1500
gagettaaat ettetgeeet getetetgae ataaageaae gatgtateaa taacatatgg
                                                                     1560
atgtatcatt ttcagtgctc tgagatccaa atctaaggag tggcccacta acacagcatc
                                                                     1620
aggaggaagc agtgctttta actgcctctg tacatctttg agtttggtcg tcactgggtt
                                                                     1680
aagaatcttc ttcgtgattc ccgaaaagc
                                                                     1709
```

```
<211> 1320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (48)...(703)

<223> similar to gi5305702 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3446
tacgccaagc ttggcacaag gccaggctgc acgcgggga ctgggcaggc cgggcccggg 60
cactggtggg tgacagtcat acttcgtgga gcccagcgag catcccgggc aagcactacc aggctgtggg tctgcacctc tggaaggtag agaagcggcg ggtcaatctg cctagggtcc 180
```

```
tgtccatgcc ccccgtggct ggcaccgtgt gccatgcata cgaccgggag gtccacctgc
                                                                      240
gttgtgaget etcaceggge tactacetgg etgteeceag caeetteetg aaggaegege
                                                                      300
caggggagtt cctgctccga gtcttctcta ccgggcgagt ctcccttagc gccatcaggg
                                                                      360
cagtggccaa gaacaccacc cccggggcag ccctgcctgc gggggagtgg gggaccgtgc
                                                                      420
agctacgggg ttcttggaga gtcggccaga cggcgggggg cagcaggaac tttgcctcat
                                                                      480
accccaccaa cccctgcttc cccttctcgg tccccgaggg ccctggcccc cgctqcqtcc
                                                                      540
gcatcactct gcatcagcac tgccggccca gtgacaccga gttccacccc atcggcttcc
                                                                      600
atatcttcca ggtcccagag ggtggaagga gccaggacgc accccactg ctgctgcagg
                                                                      660
agccgctgct gagctgcgtg ccacatcgct acgcccagga ggtgagccgg ctctgcctcc
                                                                     720
tgcctgcagg cacctacaag gttgtgccct ccacctacct gccggacaca gagggggcct
                                                                     780
tcacagtgac catcgcaacc aggattgaca ggccatccat tcacagccag gagatgctgg
                                                                     840
gccagttcct ccaagaggtc tccgtcatgg cagtgatgaa aacctaacag ggtggcccc
                                                                     900
tgtgccagct caggtgactg gagcccgagg gcctgacagg ttcccagcag ctgggccggc
                                                                     960
cageettgea etgtggggge tggteetgag tettggeetg eeteceagee etgeeagggg
                                                                    1020
gctgcggcct aggggtccac gggaagcctc cgtcaggaga gacgcagccc tgggggccag
                                                                    1080
ctggtgctgc aaggaagggt gggaagcttg ctggcttctg ttgcgccact gagacggcag
                                                                    1140
agaccccagg atcccagagc ttcccaggat ccctccaga tcctctqctq actccatatg
                                                                    1200
gaggcctcac acccagaggg tagggcagca gatcttcttt ataactattt attgttcgaa
                                                                    1260
tcacttttag gatgtaactt tataaataaa catgagcgct gatgatttgc aaaaaaaaa
                                                                    1320
```

```
<210> 3447
<211> 954
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(529)
<223> similar to gi1924940 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3447 cgcaagccta cgcggaaggg aatggccaag ggaaaacctc ggaggtcgtc ccaagcccct 60 accogggogg cocctgogc coccagaggo atggatogca atggggtgcc cocctotgcc 120 agagggggcc ccctgcccct ggagatcatg tctggagggg qcacccacaq qcctccccqq 180 ggccctccgt ccacatccct gggagccagc agacgacccc gggcacgtcc gccctcagag 240 cacaacacag aattootcaa cgtgootgac cagggoatgg coggoatgca gaggaagcgo 300 agcgtggggc aacggccagt gcctggtgtg ggccgaccca agccccagcc tcggacacat 360 ggtcccaggt gccgggccct ataccagtac gtgggccaag atgtggacga gctgagcttc 420 aacgtgaacg aggtcattga gatcctcatg gaagatccct cgggctggtg gaagggccgg 480 cttcacggcc aggagggcct tttcccagga aactacgtgg agaagatctg agctgggccc 540 tgggatactg cettetett egecegeeta tetgeetgee ggeetggtgg ggageeagge 600 cctgccaatg agagcctcgt ttacctgggc tgcaatagcc taaaagtcca gtcctttggc 660 etecagteet geecaggeee tgggteaeea ggteaetget geageeeeeg eecetgggee 720 ctggtcttcc tccaacatca cacctgctgc ccattctcca tttctgtgtg tgtcaaaggg 780 gactaacage agaatetace teccaactge catgtgatta agaaatgggt ettgagteet 840 gtgctgttgg caaagttcca ggcacagttg gggagggggg ggtccttaac aagcgtgact 900 ttgctcattc tgtcatcact aaggcaataa acctttgcca ggtgaaaaaa aaaa 954

```
<210> 3448

<211> 4009

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2)...(3247)

<223> similar to gi3882313 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3448
agaaaatgca gttgggagct ggacagatga cttgacccag ttgagcctgc tgaaggacac
                                                                       60
cctctctgcc tatatcagtg ctgatgatat ctccattctt aatgaacgcg tagagcttct
                                                                      120
gcaaaggcag tgggaagaac tatgccacca gctctcctta aggcggcagc aaataggtga
                                                                      180
aagattgaat gaatgggcag tottcagtga aaagaacaag gaactotgtg agtggttgac
                                                                      240
tcaaatggaa agcaaagttt ctcagaatgg agacattctc attgaagaaa tgatagagaa
                                                                      300
geteaagaag gattateaag aggaaattge tattgeteaa gagaacaaaa tacageteea
                                                                      360
acaaatggga gaacgacttg ctaaagccag ccatgaaagc aaagcatctg agattgaata
                                                                      420
caagctggga aaggtcaacg accggtggca gcatctcctg gacctcattg cagccagggt
                                                                      480
gaagaagctg aaggagaccc tggtagccgt gcagcagctt gataagaaca tgagcagcct
                                                                      540
gaggacctgg ctcgctcaca tcgagtcaga gctggccaag ccaatagtct acgattcctg
                                                                      600
taactcggaa gaaatacaga gaaagcttaa tgagcagcag gagcttcaga gagacataga
                                                                      660
gaagcacagt acaggtgttg catctgtcct caacctgtgt gaagtcctgc tgcacgactg
                                                                      720
tgacgcctgt gccactgatg ccgagtgtga ctctatacag caggctacga gaaacctgga
                                                                      780
ccggcggtgg agaaacattt gtgctatgtc catggaaagg aggctgaaaa tcgaagagac
                                                                      840
gtggcgattg tggcagaaat ttctggatga ctattcacga ctttgaagat tggctgaagt
                                                                      900
cttcagaaag gacagctgct tttcccagct cttctggggt gatctataca gttgccaagg
                                                                      960
aagaactaaa gaaatttgag gctttccagc gacaggtcca cgagtgcctg acgcagctgg
                                                                     1020
aactgatcaa caagcagtac cgccgcctgg ccagggagaa ccgcactgat tcagcatgta
                                                                     1080
gcctcaaaca gatggttcac gaaggcaacc agagatggga caacctgcaa aagcgtgtca
                                                                     1140
cctccatctt gcgcagactc aagcatttta ttggccagcg tgaggagttt gagactgcgc
                                                                     1200
gggacagcat tctggtctgg ctcacagaga tggatctgca gctcactaat attgaacatt
                                                                     1260
tttctgagtg tgatgttcaa gctaaaataa agcaactcaa ggccttccag caggaaattt
                                                                     1320
cactgaacca caataagatt gagcagataa ttgcccaagg agaacagctg atagaaaaga
                                                                     1380
gtgagccctt ggatgcagcg atcatcgagg aggaactaga tgagctccga cggtactgcc
                                                                     1440
aggaggcctt cgggcgtgtg gaaagatacc ataagaaact gatccgcctg cctctcccag
                                                                     1500
acgatgagca cgacctctcg gacagggagc tggagctgga agactctgca gctctgtcgg
                                                                     1560
acctgcactg gcacgaccgc tctgcagaca gcctgctttc tccacagcct tcctccaatc
                                                                     1620
tetecetete getegeteag ecceteegga gegageggte aggaegagae acceeggeta
                                                                     1680
gtgtggactc catccccctg gagtgggatc acgactatga cctcagtcgg gacctggagt
                                                                     1740
ctgcaatgtc cagagctctg ccctctgagg atgaagaagg tcaggatgac aaagatttct
                                                                     1800
acctccgggg agctgttggc ttatcagggg accacagtgc cctagagtca cagatccgac
                                                                     1860
aactgggcaa agccctggat gatagccgtt ttcagataca gcaaaccgaa aatatcattc
                                                                     1920
gcagcaaaac tcccacgggg ccggagctag acaccagcta caaaggctac atgaaactqc
                                                                     1980
tgggcgaatg cagtagcagt atagactccg tgaagagact ggagcacaaa ctgaaggagg
                                                                     2040
aagaggagag ccttcctggc tttgttaacc tgcatagtac cgaaacccaa acggctggtg
                                                                     2100
tgattgaccg atgggagctt ctccaggccc aggcattgag caaggagttg aggatgaagc
                                                                     2160
agaacctcca gaagtggcag cagtttaact cagacttgaa cagcatctgg gcctggctgg
                                                                     2220
gggacacgga ggaggagttg gaacagctcc agcgtctgga actcagcact gacatccaga
                                                                     2280
ccatcgagct ccagatcaaa aagctcaagg agctccagaa agctgtggac caccgcaaag
                                                                     2340
```

```
ccatcatcct ctccatcaat ctctgcagcc ctgagttcac ccaggctgac agcaaggaga
                                                                    2400
gccgggacct gcaggatcgc ttgtcgcaga tgaatgggcg ctgggaccga gtgtgctctc
                                                                    2460
tgctggagga gtggcggggc ctgctgcagg atgccctgat gcagtgccag ggtttccatg
                                                                    2520
aaatgagcca tggtttgctt cttatgctgg agaacattga cagaaggaaa aatgaaattg
                                                                    2580
tccctattga ttctaacctt gatgcagaga tacttcagga ccatcacaaa cagcttatgc
                                                                    2640
aaataaagca tgagctgttg gaatcccaac tcagagtagc ctctttgcaa gacatgtctt
                                                                    2700
qccaactact ggtgaatgct gaaggaacag actgtttaga agccaaagaa aaagtccatg
                                                                    2760
ttattggaaa tcggctcaaa cttctcttga aggaggtcag tcgtcatatc aaggaactgg
                                                                    2820
agaagttatt agacgtgtca agtagtcagc aggatttqtc ttcctqqtct tctqctqatq
                                                                    2880
aactggacac ctcagggtct gtgagtccca catcaggaag gagcacccca aacagacaga
                                                                    2940
aaacgccacg aggcaagtgt agtctctcac agcctggacc ctctgtcagc agtccacata
                                                                    3000
gcaggtccac aaaaggtggc tccgattcct ccctttctga gccagggcca ggtcggtccg
                                                                    3060
gccgcggctt catgttcaga gtcctccgag cagctcttcc ccttcagctt ctcctgctcc
                                                                    3120
tecteategg gettgeetge ettgtaceaa tgteagagga agaetaeage tgtgeeetet
                                                                    3180
ccaacaactt tgcccggtca ttccacccca tgctcagata cacgaatggc cctcctccac
                                                                    3240
tctgaactaa gcagatgcca tctgcagaag tgctggtagc ataaggagga tcgggtcata
                                                                    3300
agcaatccca aactaccaac aagaggacct tgatcttggc gaaagccctc ggtgtggcag
                                                                    3360
ctttagccct cctccagatc acatgtgtgc aaattatggc ttcagaggtg gaagataaac
                                                                    3420
agtgacgggg gaacaaacag acaacaagaa ggtttggaag aaatctggtt tgagactctg
                                                                    3480
aaccttagca ctaaggagat tgagtaagga cctccaaagt tccccggact catgaattct
                                                                    3540
gggcccttgg cccattctgt gcacagccaa ggacttcagt agaccatctq qqcaqctttc
                                                                    3600
ccatggtgct gctccaacca tcagataaat gaccctccca agcaccatgt cagtgtcgta
                                                                    3660
caatctacca accaaccagt gctgaagaga ttttagaacc ttgtaacata caatttttaa
                                                                    3720
gagettatat ggeagettee tttttaeett gtttteettt ggggeatgat gttttaacet
                                                                    3780
ttgctttaga agcacaagct gtaaatctaa aaggcacttt tttttagagg tataaagaaa
                                                                    3840
aactagatgt aataaataag atcatggaag gctttatgtg aaaaaagttg aatgttatag
                                                                    3900
taaaaaaaaa aagatattta tgtatgtaca gtttgctaaa gccaagtttt ggtttggtaa
                                                                    3960
4009
    <210> 3449
     <211> 2368
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
    <222> (2291)...(1951)
     <223> similar to gil203928 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3449
acttagtgca tagactttat caaatgttga ataaaaacag aaacaaaaag gagacaatcc
                                                                     60
tacaatgaaa aggagacact caggtccacc ctagtgattc cttgtatgtg gaggaggtaa
                                                                     120
gtgggacatg gacagttcta aaatatagta cgtatatacc cgacaaccac agtgttttgc
                                                                    180
atttctttat cagtgaaaaa caaactgata tctgaagtgt ataaacagtt ccctagtagt
                                                                    240
ctatttgaga aaaagtatca aatgtgcatc aatatgttaa aactgacaaa tacaagaaaa
                                                                    300
gcattcagct agagaaaatt cacagcattt tattcaagtt aatcaatttc attcaataat
                                                                    360
ctgccatatt gttcccagca ccactattac tgttattatt tctctttgag gaagaccagg
                                                                    420
tattaagaaa totggtttga atttocatga tgootaacto tatggttaaa aatootttto
                                                                    480
```

540

cttaccaaaa aggaacttct taatcaccag agaaacagag ggaagactga gatatgtttg

```
cagaaattta tototactag agacaattca tagttcataa totttcaggg ttgtgcttta
                                                                      600
cttgggggct ccgttttcgg gagcgggttg tttcccataa atgtttgctt aatacaaata
                                                                      660
atttgcccca ctgtaccaca gaagggaaat gagggctagt gtccccagaa agcaagcagg
                                                                      720
cagtcctcca gggaagaagc cctaatggct cctagtggtg acagagtcat tctqcctccc
                                                                      780
cagcctgtga gcaataataa agtataacta agtgaacagg agaggtaata actagccaga
                                                                      840
taacccatgg gctagaatct ctaaacagaa atgcttgtgt tttgaataaa tcagagctgg
                                                                      900
aaagacacac ttttggagaa gtgattgaga atagaaaggt atgaaaaaga taaaggtttc
                                                                      960
tcaccaacga aaccacaaaa aaggtggtac cagtcaaagg tagacttggg cttttatttt
                                                                     1020
ggggtgaggg taccccaaat gggttgtgcc attttcacat aaaaattgga atgataatga
                                                                     1080
acaagtgaaa gtgaaatcag tttccctcct ttgttcaata aacatggtta gagcacctgt
                                                                     1140
gtgcaagata gtgggacagg tgctgagggg aaaggtaaag ctgtttaagc tgtggccctg
                                                                     1200
agctgaagga gcaatctagc agtgccatca ggccctgcac actgcagagc acagtgtccc
                                                                     1260
aggggccagg tggagggaag gatcacttcc ggctgcagca tcagggaagg cactctgcag
                                                                     1320
teteceetee aggtteteag egtgeeteta tgeetgtgtg actgeteage etgeeceatt
                                                                     1380
ccaggcactt gctcatcttc cttatctttc tctgtagcat gagaaatgga agtttgagag
                                                                     1440
gataggatcc tacctcacag gtacctaata aatgtgtgtg gaattgacat atagtggaag
                                                                     1500
tgtcacttta tcttagtgca gcaaggtgga aagagctttg gaaaggagag gaaagatggt
                                                                     1560
ggttgtgagg gtaaggtgtt ttcatcagaa ggcgggagca agggtataca aaccaaaaag
                                                                     1620
tcagtttagt atgtggctta gctcagagca cacgagggta ccaacacagc caaagactgt
                                                                     1680
aagaaggtag ctgaagtcct ctgccaaata ggattgaaaa gctaaaatct ttctctgttt
                                                                     1740
ctttcttaag taacaactgg tctattcaag ctcaaccaga gcatataaga gaaaaactga
                                                                     1800
ctaacgaggg ggtcttaaag agctttgaag gacagtttct agaaagtaga aagatcactg
                                                                     1860
agtaaattac tgcacctcct ctaccccaca aaaaaaaggg tgaggatgaa tgtaaaagtg
                                                                     1920
tagagcaagc tttcagacaa cttcaagttt gtttttggcg cttccgtttg taagcaatca
                                                                     1980
agatggtgag agacgctatc ccaaagaaga aagtctgtag gaaccagagt agctgagccc
                                                                     2040
gaccacttgt gatgccttta tgcttgcaca atactatggc atacaaggac tctcccacat
                                                                     2100
gaatcagcca ggcaagccaa tacccattgc acaggagggt gtgatggtgg tccaccaagt
                                                                     2160
actgagtgaa ggggcccagg ggcccaaggt tctgataagg gatactctga ggccagaaga
                                                                     2220
caacccatgt gtagtagcca aagctgaggg tgatgactgt gaaccagaac agactgcctc
                                                                     2280
gctgaaagta ggtcgcgccg gctgccgtag ccatggctgc aacacctccc cgcccacgcg
                                                                     2340
tccgcccacg cgtccgccca cgcgtccg
                                                                     2368
```

```
<210> 3450
<211> 3790
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3292)
<223> similar to gi3413874 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3450

cggacgcgtg ggttggattt tttccgtgga tctatcaatt cacaattcga atttggaaga 60
aagaaggaaa acatgacgtc tccagccaaa ttcaaaaagg ataaggagat catagcagag 120
tacgatactc aggtcaaaga gatccgtgct cagctcacag agcagatgaa atgcctggac 180
cagcagtgtg agcttcgggt gcaactgttg caggacctcc aggacttctt ccgaaagaag 240
gcagagattg agatggacta ctcccgcaac ctggagaagc tggcagaacg cttcctggcc 300
aagacacgca gcaccaagga ccagcaattc aagaaggatc agaatgttct ctctccagtc 360
```

aactgctgga atctcctctt aaaccaggtg aagcgggaaa gcagggacca taccaccctg 420 agtgacatct acctgaataa tatcattcct cgatttgtac aagtcagcga ggactcagga 480 agactettta aaaagagtaa agaagtegge cagcagetee aagatgattt gatgaaggte 540 ctgaacgagc tctactcggt gatgaagaca tatcacatgt acaatgccga cagcatcagt 600 gctcagagca aactaaagga ggcggagaag caggaggaga aqcaaattqg taaatcggta 660 aagcaggagg accggcagac cccacgctcc cctgactcca cggccaatgt tcgcattgag 720 gagaaacatg tccggaggag ctcagtgaag aagattgaga agatgaagga gaagcqccaa 780 gccaagtaca cggagaataa gctgaaggcc atcaaagccc ggaatgagta cttgctggct 840 ttggaggcaa ccaatgcatc tgtcttcaag tactacatcc atgacctatc tgaccttatt 900 gatcagtgtt gtgacttagg ctaccatgca agtctgaacc gggctctacg caccttcctc 960 tctgctgagt taaacctgga acagtcgaag catgagggtc tggatgccat cgagaatgca 1020 gtagaaaacc tggatgccac cagtgacaag cagcgcctca tggagatgta caacaacgtc 1080 ttctgccccc ctatgaagtt tgagtttcag ccccacatgg gggatatggc ttcccagctc 1140 tgtgcccage agectgtcca gagtgagetg ctacagagat gcctacaact gcagtetege 1200 ttatccactc taaagattga aaacgaagag gtaaagaaga caatggaggc caccctgcaa 1260 accatccagg acattgtgac tgtcgaggac tttgatgtgt ctgactgctt ccagtacagc 1320 aactccatgg agtccgtcaa gtccacggtc tctgaaacct tcatgagcaa gcccaqcatt 1380 gctaagagga gagccaacca gcaagagaca gagcagtttt atttcacaaa aatgaaagag 1440 tacctggagg gcaggaacct catcaccaag ttacaagcca agcatgacct tctgcagaaa 1500 accetgggag aaagteageg gacagattge agtetageea ggegeagete aactgtgagg 1560 aaacaggact ccagccaggc aatteetetg gtggtggaaa getgtateeg gtttateage 1620 agacacggac tacagcatga aggaattttc cgggtgtcag gatcccaggt ggaagtgaat 1680 gacatcaaaa atgcctttga gagaggagag gaccccctgg ctggggacca gaacgaccat 1740 gacatggatt ccatagctgg tgtcctgaag ctttacttcc ggggggctgga acaccctctc 1800 ttccccaagg acatctttca tgacctgatg gcctgcgtca caatggacaa cctgcaggag 1860 agagetetge acateeggaa agteeteeta gteetgeeca aaaceaetet gattateatg 1920 agatacctct ttgccttcct caatcattta tcacagttca gtgaagagaa catgatggac 1980 ccctacaacc tcgccatctg cttcgggccc tcgctaatgt cagtgccaga gggccacgac 2040 caggtgtcct gccaagccca cgtgaatgag ctgatcaaaa ccatcatcat ccagcatgag 2100 aacatcttcc caagccccag ggagctggag ggccctgtct acagcagagg aggaagcatg 2160 gaggattact gtgatagccc tcatggagag actacctcgg ttgaagactc aacccaggat 2220 gtgaccgcag agcaccacac gagcgatgac gaatgtgagc ccatcgaggc cattgccaag 2280 tttgactacg tgggccggac agcccgagag ctgtccttta agaagggagc atccctgctg 2340 ctttaccagc gggcttccga cgactggtgg gaaggccggc acaatggcat cgacqqactc 2400 atcccccatc agtacatcgt ggtccaagac accgaggacg gtgtcgtgga gaggtccagc 2460 cccaagtctg agattgaggt catttctgag ccacctgaag aaaaggtgac agccagagcg 2520 ggggccagct gtcccagtgg gggtcatgta gccgatattt atcttgcaaa catcaacaag 2580 caaaggaagc gtccagaatc tgggagcatc cggaaaactt ttcggagtga cagccatggg 2640 ctgagcagtt ccctgactga ctcctcctcc ccaggggtgg gggctagctg ccgcccatcc 2700 tcccagccca tcatgagcca gagcctcccc aaagaagggc cagataagtg ttccatcagt 2760 gggcacggga gcctcaactc catcagccgc cactcatccc tgaagaatcg gctggatagt 2820 ccacagatcc ggaagactgc cacagcggga aggtcaaaaa gcttcgataa ccatcggccc 2880 atggaccctg aggtcattgc tcaggatatt gaggcaacaa tgaactcggc cctgaatgag 2940 ctacgggaac tagaacggca gagcagtgtc aaacacaccc ctgacgtggt tctggacacc 3000 ttggagcccc tcaaaacctc cccagtggtg gcccccacgt cagagccctc cagccctctg 3060 cacacccage teetcaagga eccegageee geettecage geagegeeag tactgetggg 3120 gacategeet gegeetteeg geetgteaag tetgteaaga tggetgeeee ggteaaacea 3180 ccagccacta cggcccaagc ccacatgtct tccccaaaac aaatgccact agccctggtg 3240 tcaactcatc aacttcccca cagtctactg acaagtcttg tactgtctga gggataataa 3300 tttaattgtt ctagacaagg ggactatagg gactgactgt tattaaaatc ttcctattta 3360 actagcttgg ggacttcagt tgaaaattag gttctaagtt gttcttgcag gaattagcct 3420 ccccgtctcc caaaaccttg agaatgaagc ccttggtatc gcctctccct tcccactgcc 3480 ctctgcttcc cccagtcgtc gtaattcagc cagctgcagt ccgtaccgtt cttaggttag 3540 ccagagacag gttttcatta tcaggtcact gtgaaatctg gtaaggcagt cctgaggaca 3600 tgggctcaag tctcagtccc ctcagaccac ggtgatgcct tgaccagatg gttggctact 3660 gccatccage tttcagtgge atcttgtttt gggaactgat tatagagaat catatatagt 3720 3780

<210> 3451 <211> 2343

1860

1920

1980

2040

2100

2160

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2344)...(2121)
     <223> similar to gi5817268 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3451
ttttttttt ttaaaattaa ataaactttt attttggaat gatactagat ttacagagaa
                                                                       60
gttgcagaga tagtacaaag agttcctgta tacccttcac ccagcctacc ccaaggtcaa
                                                                      120
catcttacat caccatggta catctgtcaa aaccaagaga ctgaaattgg tatattaact
                                                                      180
aaaattcaga cttttttcag atttccaatt ttcccactaa tgtcctgttt ttgttccaag
                                                                      240
acccaatcca ggatgccaca ttgcactgaa gacactctcc cttttcaatt ctattactgg
                                                                      300
tcacctcagt caactttccc ggggaaagag aatgcatggg aaaagctctt gtccttatta
                                                                      360
ttgaactgga gaaactgagg cttaaaagtg ccgagtgacc aagttccctt agagggcagt
                                                                      420
gagaacaagg cctgccttac tctgttccct ttccccaggg actcttggtt ttcagaagcc
                                                                      480
cctctggaat gtcctacctg gcctaacccc ataccagcag tgcagacaag gaggcactcc
                                                                      540
tactacagtg ggtccagccc atggagagac tcacttcctg ccccaacacc tcttcccta
                                                                      600
gaccctgagg gccaggacaa tgtcttagtg ccttccaact tggcagagtg aggccccatg
                                                                      660
agacagagag aaagggggaa qagggaaata cctttatcca aataaatacc catccaaaat
                                                                      720
tatttgtgat aggtgaaaaa tggccacaag ctctttgtgg ttcccctcat caagacatgt
                                                                      780
agtctgtttc tcatcccttg aatctgggta aagccttgtg atttgctctg accaaaagaa
                                                                      840
cttagcagaa gtgacactgt cctagtccca gttccaggcc aagaactcaa gaagtctttc
                                                                      900
agettetact eteaetetet ttggaateet gaageeatea tgtgaataag eetgagetag
                                                                      960
cctgctggag aggccacatg gaggagaacc aagcaattcc agccaacagc ctgtcacctg
                                                                     1020
ccaggcaagt gagtaaggct atcctagacc atccaggccc agctgaggta acagctgacc
                                                                     1080
ttagctccat gagggatccc aggtgtgagc agcagaactg ccctgttgag cccagcccaa
                                                                     1140
attgccaacc cataggattg tgggaaaata cagggtttgt ttctagctgc caagtttggg
                                                                     1200
gatggtttgt tacacagcaa aagctaactg gtacacaatt ctgcatttct ctcttggtaa
                                                                     1260
tgggatccca gttttattgc aggaggcagt gtgccagtct cagtagatgg aacacgattg
                                                                     1320
gtctattcag ccatgacaat tctgttccct gctgtcttag ctttgtttgc agctagaggt
                                                                     1380
gcaatggtag ctggctcggg ccaagggcat ctaagtgaag atatgcagag ggagagagca
                                                                     1440
ggaaacagac ttctgacgag gttttacttt ctgatagaag gtgacgggtc cagctagttt
                                                                     1500
ggcccttcct cttcctccac ccctccttcc ttgaacgcag acatgattct tggggataca
                                                                     1560
gcagccatct tgggaccatg aagtaacgag cactgagatt aaggcaaaag gatccaagac
                                                                     1620
gtgaccceta cettegtgga gttgttgaac caataccatt agccacccat etccagaate
                                                                     1680
catgctatgt ggaaaaacaa tcttctgttt gtttaaacca ctgcaatcaa ggttttcctt
                                                                     1740
tccttgcagc tgaatgtagt ccatataaga ggttacatag acaaaaatgc agagggatcc
                                                                     1800
```

ttgtccttgg gaatttggag ccggcagcac gtggctcttc aagcccatct ctgttctcct

tctcggtaat gcttcaaggg taaggccatg atcctattgt cacagaggtg ggaactgggg

ctcccacact gtacagtgag tccaaggcct tgtagccggt gagaggggtg cccagagtca

gacceteteg ccaggtgeaa agagaatgea eccetgetat ecettetgea tggeecagee

tgctggaggc caggtgtgtc ttctgggctc ttgaaggtgg cagcaggtgc caaggaggct

gctactgcaa gtctggtgtg gatgctccca ggtacaccct taggtctgag agagtggact

```
ggacaagctt ggcggggatg gtctctcgct gcagttgctg gtaggccgcg tagcggtggc 2220
agcccccaaa ggagtagaag tagtcacctc cctgggcccc tttgatccag aggacatcga 2280
tggggggcac gctgtctggg tcctcccgga tcgtgtccac gaggctctgc accttggcgg 2340
ggt 2343
```

```
<210> 3452
<211> 981
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(319)

<223> similar to gi5824545 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3452 gccgcggtcg ctatggagga gccggagatg cagctcaagg ggaagaaagt cacggacaag 60 ttcactgaga gcgtctacgt cctggccaac gagccatccg tggccctgta ccggctgcag 120 gagcatgtgc gtcgctccct ccccgagctg gcccagcaca aggcagacat gcagcgttgg 180 gaggagcaga gccagggagc catctacact gtggagtacg cctqcaqcqc cqtqaaqaac 240 ctggtggaca gcagcgtcta cttccgcagc gtggagggtc tgctcaaaca ggccatcagc 300 atccgggacc atatgaatgc cagtgcccag ggccacagcc cggaggaacc acccccgccc 360 tecteageet gateetggaa gagaeteggg geeeceeage eteegeeaac eeagagaegg 420 ggtttcacca tgttggctag gctggtctca aactcctgag ctcgtgatcc tcccgcctca 480 gcctcccaaa gtgctgggat tataggtgtg agccaccgca cccagccttg gttctccctt 540 tetteatetg gataaggaag getggaetge acetteteta eaggetgagt tggaeatteg 600 cagatctacc ctcccaacct gcattctgcc tcaagcagca acgcccaccc caggctcagg 660 ccacatggag aagccaccc tagttccagt ggtggatgtg gcacctcggc ctggccaatc 720 agagctccct tgtcctaggt tcctagtgat tggttcgaga tggacacgtg acccaatgag 780 cggcctttcc tgggagttct accaggagca tcaggaaggt tgagctgggt qtatqqqaac 840 caggccgggg cgaggggttc caggggggac ctgagaacat tgcgtggagc cctggatcca 900 actgtacctg acactagcca atttcatttc ttcaqtttca tqqaccccta aattatqatt 960 tttgccaaaa tgaaaaaaa a 981

```
<210> 3453
<211> 4362
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(1532)
<223> similar to gi1503988 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3453 gcggcggggc tccggctgcg ctcgtggccg ggccgggcgg ggaggccggt cccgcgggcg 60 ggggcagggg cggctccgcg gcttctcccg ccgccgccgc caaggggagt ttccaggaag 120 tggccatatt ggatccattc agccgcagcc gcccgggcgg agcgcgtccc gcagccggct 180 ggtccctgtc gctgcccctg cgctcgtccc agcccacccg cccggtgcgg agctcgccat 240 ggcggccacc gacctggagc gcttctcgaa tgcagagcca gagccccgga gcctctccct 300 gggcggccat gtgggtttcg acagcctccc cgaccagctg gtcagcaagt cggtcactca 360 gggcttcagc ttcaacatcc tctgtgtggg ggagaccggc attggcaaat ccacactgat 420 gaacacactc ttcaacacga ccttcgagac tgaggaagcc agtcaccatg aggcatgcgt 480 gcgcctgcgg ccccagacct acgacctcca ggagagcaac gtgcagctca agctgaccat 540 tgtggatgcc gtgggctttg gggatcagat caataaggat gagagttaca ggcccatagt 600 tgactacatc gatgcgcagt ttgaaaatta tctgcaggag gagctgaaga tccgccgctc 660 gctcttcgac taccatgaca caaggatcca cgtttgcctc tacttcatca cgcccacagg 720 gcactccctg aagtctctag atctagtgac catgaagaaa ctagacagca aggtgaacat 780 tattcccatc atcgccaagg ctgacaccat ctccaagagc gagctccaca agttcaagat 840 caagatcatg ggcgagttgg tcagcaacgg ggtccagatc taccagttcc ccacggatga 900 tgaggctgtt gcagagatta acgcagtcat gaatgcacat ctgccctttg ccgtggtggg 960 cagcaccgag gaggtgaagg tggggaacaa gctggtccga gcacggcagg tacccctggg 1020 ggagtggtgc aggtggagaa tgacgaatca ctgcgacttc gtgaagctgc gggagatgtt 1080 gatccgggtg aacatggaag acctccgcga gcagacccac agccggcact acgagctcta 1140 ccggcgctgc aagttggagg agatgggctt tcaggacagc gatggtgaca gccagccctt 1200 cagcctacaa gagacatacg aggccaagag gaaggagttc ctaagtgagc tgcagaggaa 1260 ggaggaagag atgaggcaga tgtttgtcaa caaagtgaag gagacagagc tggagctgaa 1320 ggagaaggaa agggagctcc atgagaagtt tgagcacctg aagcgggtcc accaggagga 1380 gaagcgcaag gtggaggaaa agcgccggga actggaggag gagaccaacg ccttcaatcg 1440 ccggaaggct gcggtggagg ccctgcagtc gcaggccttg cacgccacct cgcagcagcc 1500 cctgaggaag gacaaggaca agaagaatta acgcacgcac agacttacat gtcaagagtg 1560 gactttagac tttcatgtgt taagttgctt gagttacacc ttgtgaccct tctcccataa 1620 catggtgtga ggacggactg ggagccggta cagactccag tgtttacagc cttgctttcc 1680 teccacegae ectggeecea ggetgeeceg ggeetggegg gecacecete tetatgeaaa 1740 cacgtaaaag ccatgaatgc tggaatccaa aactgacgag gtttattttt ttcagagcca 1800 gtggctggtc ttccatttac agtgtcacta ttccctgacg gagctgttat gtgccgctct 1860 agcgaaggcc ccagccggga tgctaggcct aattgttcag cgtggagatg gcaactcacg 1920 tggtgcccta gggtgcagct gcgtggtctg gtatacatgc tgcaaaattc acccagctcc 1980 cctcatttta attttctaa cctacagctt aattttaata actttaaaac acttctaaat 2040 atttattttg gcaccagcgt caagacaaat aatatcctct cccattattt tcataagtaa 2100 cacagattcc ctgattttta aaaactaaaa atacagctaa acctttctta tgtataaagt 2160 atgcctatca tatacaggga gaggtgggta ataaacttcc tgtaatgaca gtgtttggca 2220 tttctttatg gatggaattg gaacatgaac aagaccatgt ccagcgtttt tactgtgaat 2280 gtaaatggaa cagcagccca aagctgttgt ctgtgcccca gaggtgctac ctgtagacag 2340 ggaccaactc catgtgtgtg tgttaagtgt ttgactccaa ttaagactcc caagcgaatc 2400 ctgcatattc caaatgtaaa gagtactcag tgggaaaaag gttgttacct caaagtcatt 2460 gcttctttcc tgggctgggt cacagggtga agagatgaag gtgtctgatg tatatagaca 2520 attagggaaa aatgagcggg caaaggagct ttccccttca gctgcactct aaaggggaac 2580 attttaaggg agtactagca gctttgactc ttctatgctc ctgttggttt tacaagccac 2640 caggatgttc agtgttgaga atacggcctg gtaaaatggg agatgtaaaa tgactaaatg 2700 aaaggaaggg tagttttaat gttgaagcac cgtgctgggc actggagcta cccagaggaa 2760 tgcacaacgc tcccctcaag gagctcacag tctagcctac tccctggctg gaagcctcag 2820 gaagacgtgc taatttattg tggaattggt agtttgcttt tcatgcccct gtcttccttc 2880 tcatgaccat ttcccccttt ctgtctggct tgcattattg atttccagga ccaagtcctg 2940 gcttcctcct gccttcctga gatgatgttc tgctcaggga gaagtggagg ggtgagctgt 3000 gtgtgtccac tgaggcacgg ccaggaagag gcagccttta cctgtgaggg gctccatgct 3060 ccagcagcag agcaggttct agtgacaatt caacttttta tgctatgacc aggggtggat 3120 ctaaatttta tggggctgaa agcttgaatt atttagaaag acttctttaa gaaaaacaat 3180

```
gttaatataa aattaggtac agggtcttgg aaggggccct gaagattaag cttccttagc
                                                                     3240
gtcacaataa gtccgtatct ggttgcaatt gaaaactgat gcttcagtga gggtatctaa
                                                                     3300
aaaggtaaac tggcatatcc agggcaaatg tgggctgcca atggctcatc tctagggtaa
                                                                     3360
ttttatgtct gaaagtgtat gcagttgggt cagagcatga cctttaagat agcctctctc
                                                                     3420
agctaacata tttatgaaga tgaggcctgg tgacccagca ggttcattgg atacataaga
                                                                     3480
aatgagaatt cctggttcat gggccaacct aggactctgg agtatgcaga cttggccatt
                                                                     3540
cgtccattgt ggcctgccgg gtcgcacccc aggcatactg aaaggccata ctcgtggctg
                                                                     3600
gctgcctgcg ggcctaagcc ttcccaggat cttcaggaca cttgacagac ttgtgttttc
                                                                     3660
tggtctgagc tgcctccaca ggtccctcca gcaagcctca ctgcacctct cccctgctgt
                                                                     3720
ttgtgtttgg aattttgtct tctttagctg agaccaaatt aaaccttggt gcataaagtg
                                                                     3780
agcttaaaac ttgccactgt ttagtaagtt agcccccata gaatgtgacc ctgtctgcag
                                                                     3840
agtctcattt acccctcttt ttctcattgt catttgttgg ctttattagg gctgtcttac
                                                                     3900
aggatcatgt tggcatttac tatcatgtct ttatcataaa ccatgtttgt ttgaggtaga
                                                                     3960
agaatcacca tataattcgt tgcccaaatt gggactattg agagagaaag gggatgctat
                                                                     4020
taattacacc agatcaaaag gcataaacca gacctgtccc aggccgatgt ggaaatatgt
                                                                     4080
tetttetagt tgtgggtace etgatetagg tggtttgtaa ttgtgcatta etgactgcat
                                                                     4140
atgtttgtgt atgtgtaaat gtgggctccc tgttaagtgg ggctcatgga tacgaggcct
                                                                     4200
gaggaagtgt ggcttgctag tctgttacgt taacatgctt ttctaaaatt gcttcacgtg
                                                                     4260
ttaattcatt tactcctgca ttcattgact gtttttgttc ttttccattc actttgtact
                                                                     4320
tattttttc attaaatttt gcatttattt tgaaaaaaaa aa
                                                                     4362
```

```
<210> 3454
<211> 1128
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1129)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1128)...(793)
<223> similar to gi4406551 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3454
ttttttttt tttggaggga gaaacaactt tattttcatc cagaaattag taatgtttat
                                                                       60
aaatttgttt atagtagttt gtaaattatt atcagaaata gtaatgtcta taaaccactt
                                                                      120
actttaagag acaatcagga actatgatga gggcaataat aaaaggagaa atcttaccaa
                                                                      180
aaaattaacc tggatcgttg tgcttgctct aaaggttaaa gtcacttagg ggaaacagat
                                                                      240
tcagtattat ccaatgggct taaccatcct tccttctttc tgtttgcttt ttggtggtgg
                                                                      300
ctgggttaca aagagcagtg tcttctgccc tgaaggtagc agtattatgg tgggtgccta
                                                                      360
gaggtcaatt attggtttag aagagattca ggcccttaac ttttacatgt gctttccagg
                                                                      420
aaaggagaca ctttctttct cagccctgtg tgaggactat gttagcccag aaagtgttct
                                                                      480
tggaccactg ggtgcccatt ctcagtgcta ggaacaggaa gaccctggtt tcctggtaga
                                                                      540
atttatggat cctacagctt tctctccatc aaactttaag tcacagtaag ataggactct
                                                                      600
ggagtcacag gcacagccag gagaggtcag cgtccttatg ctgactcctg gtcctagaca
                                                                      660
tgggtcttaa gatccagtag tcagtaggtc tgttgcaaag tcagggactg gctagatctc
                                                                      720
```

```
tccacagcag aagaaagctc atacatgctg acctgaggaa cttaatctga cagtttaccg 780 acacactcat aacgcatctc ttccttctg tgatgagagt actgctttca tgtgtactgt 840 ctgatgacgg gtgagggcag agttcttagt gaagcctctc tcacagtgag aacacctgta 900 aggcttttca ccagtgtggg tttttcggtg ggcactgaag tgggagctat tattgaagat 960 tttcccacac actgcacact tgtatgggct ctccccagtg tggatgcgcc ggtgagcact 1020 gaactgggaa ctagatgtt aatctcttc cacagacaat gcactggtaa ggctttccc 1080 cggtatgggt cgaattccnc gcnntggcct agtggtcgc tattcaag
```

```
<210> 3455
<211> 1203
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1202)...(196)
<223> similar to gi1519052 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3455 tttttttttt tctgttttcc tgttgttttt aattaaagtc gcagctctct agaggagcac 60 tgtccaccta gggaggaaag taggaggcca gtagcaaacc cctcccagag ctggggacat 120 gtattcccct ggggaacccg gtggcatccg ccctgaggag cgcaccaccc cgcccagatc 180 caggtcccgt cagggtgcca cctgctgcat gggcctgagg ttcggggaca cagcaaaggc 240 acaccccgtg ctctttttga ttgtcgtcca cccgtaggcc ctcccagagc tccctcagcg 300 tcagctcttt cttcctgtgc acgtcaaaca cgggcttctc ggtgatgatg cggtccacgc 360 acceptttcc cggtcagcgg catggtgcat ttctccatga tctttggggg tgttgtcctt 420 tgtgcagtgc tgcatggtga ccaccactct ggtcttctga ctgqacacca agtccatqqc 480 accgcccatg cctttcacct tcttgccagg gatcatccag ttcgccaggt cgccgtattt 540 ggaaacctgc atggctccaa gcatggttag ttggatgtgt ccccctcgga tcatggcgaa 600 ggagtcgtcg ctggcgaaga agcagcccc gggaagcacc gtgaccgtct gcttgcctgc 660 attgatgagg teggeateea ceteatette egtgggaaae gggeeeagge eeaggateee 720 gttctcactg tgaagatgga cagtcatgct gggactgatg aagttgctgg ccagcaqqqq 780 gatgcctatg cccagattgg cgtacatgcc gtcctcaaat tccagagctg cgcqtctgat 840 gatgcgcgtc ctggcgtcct cttcctttcc agcgtctcca tcttcctctt tccggatcgt 900 taagcgctca attcgtttct cgtatttctg cccctttatc acgcgaccta cataaatgtt 960 aggaacgtgg atgtcttctg gggggaagcc cccacctcca ccgccqtgac gtctqcaqct 1020 ttgcacatgg gcacgttgaa attgcgggcg cttctcctga agaccacgtt tcctqcccqq 1080 teggeettee accettteae cagggegaag tetgeeegga tggegegete caaaaggaag 1140 tggtcgccgt tgaactccct cacctctcgg ggctggctca tgagcgccaq gtgqccqtcc 1200 ggg 1203

```
<210> 3456
<211> 1266
<212> DNA
```

<213> Homo sapiens

```
<220>
     <221> misc feature
     <222> (1264)...(210)
     <223> similar to gi5870865 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3456
ttttttttt ttggggggct aggtataatt ttattttata taaaaagtgt ttctgtgatt
                                                                       60
cttcagagcc caggagtcag tgctggtggt tggagggacc tgccccact qqttcattta
                                                                      120
accetetgte teggtgeeet cagaacetea gecagaaagg caaggaggaa atcagageag
                                                                      180
gagcctcata ctcttggtga tctattcatt ctgtgacctc aggggtcaca tataaggtca
                                                                      240
gtgtttctcg tccccgccgg atctgcactg ccaactggga ttgggttcga acagcttcat
                                                                      300
aaacatcttc agcattttgt accatctgct ccccaatggc caaaatcaca tcaccaggcc
                                                                      360
gcagaccagc ccggtgtgca ggggagccca ggatgacttt atggatgagt acaccatgct
                                                                      420
gaacatcggg aaagcttggt tctcgaagct gtagttcagc aaggatgctg ggactcaggg
                                                                      480
tcagcatcat caccccaatg tagcgccgct gggacccact gattccggag gaggaattct
                                                                      540
tcttttcccc acgatgcaga aactctcgaa gacgatcaga agggatggca aaggagattc
                                                                      600
cagctgtgac cttcatggtg ttcactccaa tcacctcccc atccaggtta accaggggac
                                                                      660
ctccagagtt tccaaaatca atagctgcat cagtttgaat gtattccaca ttggtttggg
                                                                      720
ggagtcccag gtctctggct ggacgctgag cagagctaac aatgccggat gtgatcgtgt
                                                                      780
tetgeagtge aaagggaett eccatggeaa caacaaacte ecettgeegg acateagetg
                                                                      840
agcgtcccag aggcagcgtg gggagaggct ccttagtctg aatcctcagc gttgcgatgt
                                                                      900
ctgccacggg atccacagct gtgaccacgg cctcatacgt gtcgccgctt agcagtctca
                                                                      960
cacggactet gegeegatea gecaccacat gggegttggt gacaatgage ceateggeag
                                                                     1020
ccaccacgaa tcctgagccg ttcgagatag ggacctcgcg gcccaagaaa gggtgccggt
                                                                     1080
ccaggatete gatatagace acggeaggtg etgtettete caccacatet gegatgaagt
                                                                     1140
tgtactgact gaagtccttc agaagtgcac gccgggacca ggattccggg aggccgactc
                                                                     1200
ctccctgccc cacgaatgcc gggaattgtg gtctccgccg gacgcgagtt gtgagacggc
                                                                     1260
ccaagg
                                                                     1266
     <210> 3457
     <211> 3899
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
    <222> (1)...(2695)
     <223> similar to gi5499741 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3457
gactgcctca acaaagaagg ctttgacaaa atagatatca gtgcagttgt ggcatatacc
                                                                       60
ategetgtaa aggaggatgg ggageteaae etaatgaaga aageageeag cateaettet
                                                                      120
gaagtettea acaaattett caaggaaaga gteatggaaa tagttgatge agatgagaaa
                                                                      180
```

240

gttcgacaca gcaaactggc tgagtctgtg gaaaaggcca ttgaagagaa aaaatacctt

gctggggcag accettctae tgtggaaatg tgttaccete etateattea gagtggtgge 300 aactataatc tcaagttcag tgtggtgagt gacaagaatc atatgcactt tggggctatc 360 acttgtgcca tgggtattcg cttcaagtct tactgctcca accttgttcg cactttgatg 420 gttgatcctt ctcaagaagt tcaagaaaat tataactttt tgctccagct tcaagaggag 480 ctgctgaagg aattaagaca tggtgtgaag atatgtgacg tgtataacgc tgtcatggac 540 gtggttaaaa agcagaagcc agaactgctg aacaaaatta ccaaaaacct agggtttggg 600 atgggaattg aattcccgtg aaggctccct agtaatcaat agcaaaaatc aatacaaact 660 tgaagaaagg aatggttttc agcatcaatt taggattctc cagacctgac taacaaggag 720 gggaaaaagc cagaagagaa aacctatgcc ctgtttcatt ggtgacacag tgcctgtgga 780 tgaggatggc ccagctactg ttctcacttc tgtgagaaag aaagtgaaga atgtggggat 840 gttcctaaag aatgaagatg aggaagaaga ggaggaggag aaagatgagg cagaggacct 900 tttgggaaga ggttctcggg cagcattact tacagaaaga acaagaaatg aaatgactgc 960 agaagagaag cgaagagcac atcagaaaga actagcggct caactcaatg aagaagcaaa 1020 gaggcgattg actgaacaaa agggagaaca gcagattcag aaagctcqca aqtctaatqt 1080 gtcctataaa aacccatctc tgatgcctaa ggaaccgcat attcgggaaa tgaagatcta 1140 catcgataag aaatatgaga ctgtaataat gcccgtgttt ggcattgcaa caccgtttca 1200 cattgccaca atcaagaata taagtatgtc cgtggaagga gattatactt acttgcgaat 1260 caacttttat tgcccaggca gtgctctggg caggaatgaa ggcaacatct ttcctaaccc 1320 tgaagcgact tttgtcaagg aaattacata ccgagcatca aatattaagg cacccggaga 1380 acagacagta ccagccttga accttcagaa tgctttccga attattaaag aagtacagaa 1440 acgttataaa actcgagaag ctgaagagaa agagaaggag ggcattgtaa aacaagactc 1500 actggtgatc aatctaaacc ggagtaatcc gaaactgaaa gatctataca ttcgcccaaa 1560 tattgcccaa aagaggatgc aaggctcact ggaggcccat gtcaatggct tccgcttcac 1620 atctgttcga ggagacaaag tggatatttt gtacaataat attaagcatg ctttgttcca 1680 gccctgtgat ggagaaatga ttattgtctt gcactttcac ctcaagaatg ccatcatgtt 1740 tgggaagaag cggcacacgg atgtgcagtt ctacacagaa gtgggagaga taaccacgga 1800 cttggggaaa catcagcata tgcatgaccg agatgacctc tatgctgagc agatggaacg 1860 agaaatgagg cacaaactga aaacagcctt taaaaaatttc attgagaaag tagaggctct 1920 aactaaggag gaactggaat ttgaagtgcc ttttagggac ttgggattta acggagctcc 1980 ctataggagt acctgcctcc ttcagcccac tagtagtgcg ctggtaaatg ctacggaatg 2040 gccacctttt gtggtgacat tggatgaggt agagctgatc cactttgagc gggtccagtt 2100 tcacctgaag aactttgata tggtaatcgt ctacaaggac tacagcaaga aagtgaccat 2160 gatcaacgcc attcctgtag cctctcttga ccccatcaag gaatggttga attcctgcga 2220 cctgaaatac acagaaggag tacagtccct caactggact aaaatcatga agaccattgt 2280 tgatgaccct gagggcttct tcgaacaagg tggctggtct ttcctggagc ctgagggtga 2340 ggggagtgat gctgaagaag gggattcaga gtctgaaatt gaagatgaga cttttaatcc 2400 ttcagaagat gactatgaag aggaagagga ggacagtgat gaagattatt catcagaagc 2460 agaagagtca gactattcta aggagtcatt gggtagtgaa gaaqaqaqtq qaaaqqattq 2520 ggatgaactg gaggaagaag cccgaaaagc ggaccgagaa agtcgttacg aggaagaaga 2580 agaacaaagt cgaagtatga gccggaagag gaaggcatct gtgcacagtt cgggccgtgg 2640 ctctaaccgt ggttccagac acagetetge acceeccaag aaaaagagga agtaacttet 2700 gaactttggc cctgagctcc attcttcctc cagccaaccc ctgaaaattt tacatqacat 2760 agaaactgta tttttccttt cgttttcatt tgaagttttg ccatttgtgt ttatgggttt 2820 agggggccat ttgtgtggac caatctactc ggggaattcc aggcccacca ggacacgtgc 2880 caatggcccc attcagatgg caagggagga ggtgttcttg aagacaggag gaggctcccg 2940 ctgttaataa atattggttc attcttctct cttcctgtca ccttctgcca agacattgat 3000 ggcttctgac atcttatttg gtgtctcaaa gctgtatttc caagacagtg gtacaaggtg 3060 accettaatt accegtatea tggttettga ceageaeatt caateeteea acetaeeeta 3120 ctgccatgac cttccgcaca tctctaagtt ttatctttgc aatactcaag gttctcgqaa 3180 atttgctaat ggttgtgata aaccatacag cttgagccag tgaggcagat tgggctggtg 3240 ccttcgtctg agttttcctg ctttcctgcc tcgtgcagat tctgaggtat atctgctgcc 3300 ttggaagaca taagaagcag tgatactccc tggctcggtt attttctcca tacaatgcac 3360 acatggtaca atgatagaag gcaaaattgc cactgtcttc ttttttttct catatatcta 3420 aggaagatat atcaggttgt gcctcatgta ccgcttctag tgaaatgtag aggaaggctc 3480 aaaggagtca acatttagat ctggaaggga caagtcatgc cttgggccta gaataccctg 3540 atgagaaaag agaagaggaa gggaggccat atctacaaca cagcctctcg gcactgctgc 3600 tccttatttt aactttgtct tgcattgtcc tgtatttatc acagtttctg ttgaacagct 3660

```
tttcaagtat ttggggagtt tatcttgcca tcctccctt ctggttctct gcacccacct
                                                     3720
gtcccactgc agttccttcc gtgctctgtg actttaagag aagaaggggg gaggggtccc
                                                     3780
ggattttatg tttgtttgtt ttttctcctt agcagtagga cttgatattt tcaattttgg
                                                     3840
3899
```

```
<210> 3458
     <211> 1146
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1147)
     <223> n = a,t,c or g
    <220>
     <221> misc feature
     <222> (1)...(705)
     <223> similar to gi1916290 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3458
gggcgccggg gccgcgccg ggccggctcc agggccggcc gccgcggtgg ggcgcaggcc
                                                                    60
gettgtgega gtgaategag geggegggee cateeggaae eggeeggeea tegeeegegg
                                                                   120
cgcggccggc ggcaggcggc aggaaccgac cggcgcccta cagcaggcca aaacaacttc
                                                                   180
ccgacaagtg gcagcacgat cttttcgaca gtggcttcgg cggtggtgcc ggcgtggaga
                                                                   240
caggtgggaa actgctggtg tccaatctgg attttggagt ctcagacgcc gatattcagg
                                                                   300
aactctttgc tgaatttgga acgctgaaga aggcggctgt gcactatgat cgctctggtc
                                                                   360
gcagcttagg aacagcagac gtgcactttg agcggaaggc agatgccctg aaggccatga
                                                                   420
480
agattgacgc acagcggagg cctgcacaga gcgtaaacag aggtggcatg actagaaacc
                                                                   540
gtggcgctgg aggttttggt ggtggtggag gcacccggag aggcacccgc ggaggcgccc
                                                                   600
gtggaagagg cagaggtgcc ggcaggaatt caaagcagca gctttcggca gaggagctgg
                                                                   660
atgcccagct ggacgcctat aatgcgagaa tggacaccag ttaaacagac cagcaaatcc
                                                                   720
gcgtgcggaa caggacccag gcgtctcctc ttgctccctg gttggggggc ggtggctggg
                                                                   780
gctgtgcggc caatgatgga tttgtttctt ttatgtttaa aataggattt aaaaactcat
                                                                   840
gtaaagggtt attttttcc ttttttttt tttaaaaccc aaaacagacc tttttttccc
                                                                   900
cgagttattt ttgggaaaaa atttactggt tgctgttggg aaaaaggggc ctttccccct
                                                                   960
tttcctataa aaaaaaaaa atgtgtgtag aaaaaaaaa accaaaaaaa canggggggg
                                                                  1020
gccccctttt aaaaaacccc tcgggggccc ccatttaccc cggggttggc aaaggttatt
                                                                  1080
tttcttttt ttagggggga atataacccc ctctgggtcc ttttggaaaa ccccttttt
                                                                  1140
ttggcg
```

1146

<210> 3459

<211> 455

<212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(456)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (455)...(18)
     <223> similar to gi2429362 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3459
gtagaggtag gagctgggag acaggtagag ccatggagag gtggggatctg ggtgaggcac
                                                                       60
ggggccttgg agaggtggga cctgggtgag gggtggaacc tcggagaggt gggacctggg
                                                                      120
tgaggggtgg agccttggag aggtggggacc tgggtgaggg gtggagcctt ggagagctgg
                                                                      180
gacctgggtg aggggtggag cctcggagag gtgggacttg ggtgagggt ggagcctcgg
                                                                      240
agaggtggga cctgggtgag gggtggagcc tcggagaggt gggacctggg tgaggtgtgg
                                                                      300
aacctcggag aggtgggacc tgggtgaggg gtggaacctc ggagaggtgg gacctgggtg
                                                                      360
aggggtggag cctcggagag actgtccctg gacaggggtg ggaccttgag agacctggtg
                                                                      420
ctgagatgag gtangaccca natgtcctct tgccg
                                                                      455
     <210> 3460
     <211> 761
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (732)...(101)
     <223> similar to gi3337385 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3460
tttttattt attttatat tatttattta ttcttcgtta gtttgttttt ggagcgtggg
                                                                       60
ttttgttttg ttttttgatt tttttctttt tttcgaccca cggatttatt cttattqccc
                                                                      120
aggettgagt geaatggegt gtteteaget tacteaacet eegeetettg ggtttgggta
                                                                      180
attgttgtgc ctcggcctcc ctctgcctct tgggcttggg cgattgttcc acctcatccg
                                                                      240
ccctccgcct cttgggtttc ggtgattgtt ccacctcatc caccctccac ctcttgggtt
                                                                      300
tgggtggttt ttccgcctcg gcctcctgag tagctaaggg aggagtcttg agattatcat
                                                                      360
ccactgaggg tggaagagga gagggtggaa gagggacaaa gagacagtcc ttcagattat
                                                                      420
catccactga gggtgggaag aggagagggt ggaaggggag tqaqcaqaca ctcgggaggt
                                                                      480
gtcttgaggc tcagggagtt atcagttata gaatgttgtt gagttggagg aggtggctgg
                                                                      540
tggcccatcc tgttttttaa agtttcagct gtgaggtagg gccagtaggg caatcctgaa
                                                                      600
gaatgacgat gctccgctgc cgccattctg acccagttgc aaagagcctt tcttgcagaa
                                                                      660
ggggggattt tgcatttgtg gtagtcctct gctcgccgcc gcaactcttg cgcacgttga
                                                                      720
```

1773

```
<210> 3461
     <211> 1773
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1774)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (28)...(1270)
     <223> similar to gi5689535 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3461
tegegtaegt aegttgggat getetaeage ggeegegeea teeccateaa geaggggate
                                                                     60
ctgctaaagc ggagcggcaa gtccctgaac aaggagtgga ggaagaagta tgtgaccqct
                                                                    120
ctgtgacaac gggctgctca cctatcaccc cagcctgcat gattacatgc agaacatcca
                                                                    180
cggcaaggag attgacctgc tgcggacaac ggtgaaagtg ccagggaagc gcctgccccg
                                                                    240
agccacacct gccacagccc cgggcaccag cccacgtgcc aacggcgtgt ccgtggagcg
                                                                    300
gagtaacaca cagctgggtg ggggcaacag aggcagagga gtcgtttgaa tttgtgggtg
                                                                    360
ggtgtccctc actggggcag acgtgggcac tttcgagggt ttcaacgggc ggagggagcg
                                                                    420
ggagctgtgg gttcagagtg tgcaggccca gatccttgcc agcctgcaag gcttgcgcag
                                                                    480
tgccaaggac aagacttcga cttggggaac cagaacgcag ctctggctgt gcaggccgtc
                                                                    540
cgcaccgtcc gcggcaacag cttttgtatc gactgcgatg cacccaatcc agactgggcc
                                                                    600
agcctgaacc tgggtgccct gatgtgcatt gagtgctcag gcatccaccg acacctgggg
                                                                    660
gctcacctgt cccgggtgcg ctcccttgac ctcgatgact ggccgngtga gctgctggct
                                                                    720
gtcatgactg ccatgggcaa tgccctcgcc aacagcgtct gggaggggc cttgggtggc
                                                                    780
tactccaagc cagggcctga tgcctgcaga gaggagaagg aacgctggat acgggccaag
                                                                    840
tatgaacaga agetetteet ggeeceactg ecaageteag atgtgeeact ggggeageag
                                                                    900
ctgctccggg ccgtggtgga agatgacctg cggctgttgg tgatgctcct qqcacatgqc
                                                                    960
1020
tccagtgcca tggccaacgt tgtcttcacg cagctgctca tctggtacgg ggtggacgtg
                                                                   1080
aggagccggg acgcccgggg cctgactcca ctggcatatg ctcgccgggc cggcagccag
                                                                   1140
gagtgtgcag acatcttgat ccagcatggc tgccctgggg agggctgtgg cttagcgcct
                                                                   1200
acccccaaca gagagcctgc caatggcacc aacccctctg ctgagctgca ccgtagtcct
                                                                   1260
agcctcctat aaggcccagg aagagggcag aggggccaga aggactccat ggcccaaaga
                                                                   1320
ecetectece tgeaggeaet gtgggaaeag acaeagagat ggagaageag ggaeatgetg
                                                                   1380
agaggacgaa gccaaggaaa ttagggagga gagtcaaagg gatcaaggag agttggggat
                                                                   1440
ttgagctgca gcagagagg atgagggatt tagccctctg ccctaaggtg ccattgaaaa
                                                                   1500
gggacaggac ccttcggagg tgcctgtgag gagaggggag caggacctct ccctcctca
                                                                   1560
gatccctgcc tcctagtgcc agccctcac acgccttcat cctgaaacag gaagaggacg
                                                                   1620
gcaccaagtt gggggtgctg gatgaaagag acgaggggtg atctgtgagt cccatgtaaa
                                                                   1680
ctttgtacat tggaatattt atgtttgtgt acatatttga tgtgtgtgtg tatgatgagc
                                                                   1740
```

caataaacca gactgtgtgc gtgaaaaaaa aaa

```
<210> 3462
<211> 2239
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2152)...(1400)
<223> similar to gi1710175 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3462 ttttttttt ttctcctttc ctcaacagtt ttattgcctt ttaagaaaat ttttgtaaaa 60 tataaataca aaggcagaga atttacttac aaagttaaaa cacagatttc aaacataaac 120 acacgattca gaaaaatttt agttttatgt acatttccaa gcaacctcaa catattatgt 180 tagttttcaa tattttacag ggtacagaaa aaaatagctc aaagtcttct ttaaataaga 240 gcataaaatg tttaaacata taaacaatcc ggtttgatgc gtgaaaacta atttcacagc 300 ttttaaatta ggatataaaa gtttcataca attagttgtt gtgtgtggat atggtttgaa 360 tttatattac acactactgg attacatcca atagcattta cctqqcccqa qcaqqtactc 420 tgtaaacaaa acaaagttat atcaccaagt gccttccccg aattcgctcc ctcaaaccaa 480 ccacacagtt ctgaccactc tacagtcatg gcctgtcatc agagctttgt atgaaattaa 540 gtcaaagtgt ggagctcctt ttactcattt ttttttctcc ttaaaaaaga aaagaaacaa 600 atgttccaag taaaaacaaa cgtatcccaa agcatgtgtg cattgaaaag taaagaaaca 660 ttataacaac ttcataaaaa ctgacttaaa agtttaaaag gaaaaaaaca tgtttctaag 720 teettetgae tggagtaatt tetettatat aaagaagaga tatttteata tgtaatagtg 780 teetttettt acagaaatag ttgtattatg acacatatge acaaggatta acactataae 840 acactgtaca tggtgggtcc agcttgctca ccagtagttg tctgaggcca gatcactggg 900 gtggagccac tctacagagg agcccagcag agtctgaatt tcqttcqtqa attccaccag 960 atctaacage teettaettt eagggttgaa ggetteeagg tetttggage aagagaacaa 1020 gagacttgca gaaacctgcc gataaaattc tgcctctgca atggtgacaa tttccacgtt 1080 tggaaaattg cagcgaaata tgcgggagga cattttcaat ttcttaagga catccgaaag 1140 cagtagccag tttcgtggcc cctgagccac agatacttgg atgttataac acggtaagag 1200 gggggtctct gaaaattcaa attcaaacac atcgctatag gcatcgtcat catcatcctg 1260 gtettetggt eetggggggt tggetaaaae ateatageea ettteateat etggtteaea 1320 aacagagetg ceatagaagt cecaagtgee actggegtea teateattge gaeeetggag 1380 gtcatttaaa taatctgtta agaacttttc cataagttca ctgtgggtca ttttcatgat 1440 ggttctacct gagtacgtag ccaaggtggg gtcagcacca taagagagaa gtagtcggac 1500 aatttccaag tgatcgttct caacagcatc gtgcagaggc ctggttccat cctgggcact 1560 acagttgaca tcagcgccat attcaaggag gtgtcgcaca atgttgagcc agcccctagc 1620 acaagettea tgeagggege agtaacetge gttgteeega tgatttaeat cacaaatett 1680 gttctctaag cagtacagga ccacttcctc atagccaagc ctggctgccc gctgcagaag 1740 ggtctcgcca gcgttcttat tgacaataag tctccgtgct tccggcggca tagggcgaga 1800 ctgggtggtc tcctgagggg aacttgagca tggcagctgt gtggactggg aggctggtag 1860 cagttgctgc aagcggtcga agggctttgg ctcctgcttg gctggtgaca gatcatagtc 1920 egaactggge teeggeeget ttetgaatet eeggacagte acettgeeat eggeattete 1980 cacgtagtat teccetgtea gtggcaatee eegeetggae teetgaggga teaagtgttt 2040 ggttttgcac agtctcttcc cqqatqqctt ctcqctqttq tcqqtqtatt tctqcaqcaq 2100 ggaggcagcc tggcaatcct cttcttcgtc tgcacacagc acatctgtct tctggttttc 2160 tttaatttte tgetgtttgg caggeggeet ggaggetggt gegeagettg getgttatet 2220 atatcaggtc tcatggtag 2239

```
<210> 3463
<211> 2063
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2064)...(737)
<223> similar to gi2852632 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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```
<210> 3464

<211> 5017

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (5018)...(2724)

<223> similar to gill36418 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
gtccagcaaa ttctgataaa acacatacaa aagttaagag acagctcgat ttcatcttcc
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tcccaacacc tgcaactgtt tccagatttt ctgtgtagtc ttctttgtgc tttcagttca
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gtaaaaatta gaaaggataa caaacttgta aagtcagata cctaattgta caaaattgac
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tagaccatgg agaaggggga agcatcattt tacaaaatat tgttaagatc accagcatta
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atttaaatta ttttcctttc tggacttcca agtccacttg gcaattttac ttaggaaaat
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atcatgcgta aatagaaaac cagtattcta aacacatttt ctttatgtga catattcttg
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tgcgtctatg taatgagaat ttttaaaaaa ttgttttctt cctgctgtca aaacttaggc
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attaaaaata agggactgta aacctagttg acttacccat aaaaaggagt aagttcggag
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                                                                     1080
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```

```
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```

```
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<211> 4236
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature

2246

<222> (2)...(3648) <223> similar to gi3882329 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

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agaacttcca gctgcagctc attcctccac ctgtgactga ggattgatga ctccatggag
                                                                     3660
cctggcccag gagaaccaga gatgatcccg aggcagctgg ggagaggccc cgcctctggt
                                                                     3720
gggcttggcc tccaccacct cccacgcttc tgagaagagg ttccaaattg ggcttctgtg
                                                                     3780
cccagagcgt ccacagcacc attcccagtg tagactccca gtcttctcca cattgctgtc
                                                                     3840
atggcgtcag ttcaccagac tcattgattt tgttttgctt gttaagcaaa ggaatgtcac
                                                                     3900
atacctctgt ccagcttttt aggaaataca tttcgcctat tgcgactttt tccatttacc
                                                                     3960
ctgaagccta gaaagtaggt ggaactcaca caaatggcat tccagagtct gccatactcc
                                                                     4020
gtctcctcca gctgctggat aatacagagg aacttcaact tctacaggga acagtggttg
                                                                     4080
gccaggctgc agtataactg aagcatgcct tggagagagc agacactgtg ggggccaggg
                                                                     4140
ccatctccct ttaatgtgtt catgttaaaa cctatttgag tgtaagactt gccctttcta
                                                                     4200
acaataaatg ctccgtgttt aagttcaaaa aaaaaa
                                                                     4236
```

```
<210> 3466
<211> 939
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (940)...(137)
<223> similar to gi2664429 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3466
cggccgcaag tgtttttgtt ttttttgttt tgtgattttt tttgtttttt tgtttttgcc
                                                                       60
cttcatggtc cgagaaggaa acggtggaag gtttcacatg gttccaatgc tgtaggtcgc
                                                                      120
cgcgggcccg atggtgtgat ggtacgggtc ggcagctgcg tagactctgc cgtaactgtc
                                                                      180
gctgtaggct gccgccgctg cagcgggctg agcgtatctg taggctgcgt agcctccata
                                                                      240
aatctcagca ccataaaatc catcctgata cacgaccgct ccgtaagtcg ggatggggg
                                                                      300
tgggggtggc gcagcccgaa atgtattata cacggcccgg ccccggcccc gaagatgtgc
                                                                      360
gccccggtag gcaacggctg tgccggtggt ggggtagggg aaccccgtca ctgcatagaa
                                                                      420
ttcaggcccg tagactgcgc cgaccactgg atttagcttc cagccgttgg tgtagqqqtt
                                                                      480
ccccgtcttc ttgttggtca tcactcgggc cgtggcatta ttgacctcaa ttttccgtcc
                                                                      540
ctctacgatc gtcccattca gcttctcccg ggctcggtca gcatctgagc tagtttcaaa
                                                                      600
agttacaaac ccaaaaccct tggagccccg ctcgttaaaa atgatctcca cgtctaaaat
                                                                      660
ttttccgaat tgcccgaaca tttgccgcaa gtcggggtcc ctgaaccgga aggggatgtt
                                                                      720
ggagacgtgt agccgcttgg gctgctgctt ctctgtaggg tcggaggggt ggagcggctg
                                                                      780
gctgtccgtc tgtgccgcct cgtctgtctg cggcactgtc tgggtcccgg cgatgggctg
                                                                      840
tgtgctggcc tcggagcctg gctgctcggg gtgggtctgt gctggtgtgt acagggtcat
                                                                      900
```

```
<210> 3467
<211> 1520
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1523)...(667)
<223> similar to gi817954 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3467
ttttttttc tttgaaaaaa gatgtttatt aaacaacttt aattgtcata aaatgactaa
                                                                    60
aatgggtttt aaaaattaag gctcttctct ttctgtggat tgccagaaca atgtaaaaat
                                                                   120
aatatcaatc acccctgcta aacgttttgt tcctaaagtt aaatttcata gattcctaaa
                                                                   180
cattttatga ttaagataaa aaattggact ataaatgaca attcatggcc atctgtgctg
                                                                   240
aacacacatt gatcaggtgt acaatattct aattgagtag ttaagcaaaa aatattccag
                                                                   300
ttaaagcata aattttaatt tcagcatttt aaagtcattg tttccccaca tggtcatgat
                                                                   360
tttcctaaaa ttgaaatagt ctaatacagg agcgctaacc ttgggactct atatactccc
                                                                   420
aggaggatga ctgacttggc tggcaattag tttgattata tttttttaaa tgctctaagg
                                                                   480
taaattatca aatgattcag aattacatgg catgcagtat ccaaaattat ggctctgatg
                                                                   540
600
ctcccacgaa aaagaaaaaa gtcactacct attcaagttc tagatctggt gcagcattaa
                                                                   660
ggattaaaac ttaccacttt accaggcctt ccccatgtgc aaataaatcc ctcctgacaa
                                                                   720
gcagtgacta tacagtcttc aagaaatatt agtacagtca gtctctcatg tgctatcttt
                                                                   780
ttacatatca gcggctctaa caagggaaca tcttccattc gaggacacag gggcgttccc
                                                                   840
agagttttag cagggtccgt tttggttttg gtaactagat tcagtttgtc actgctcttg
                                                                   900
ctagaaatgt gtcccatgct atgatttcgc ttgtgatctt tctcgtggtg cctctccttc
                                                                   960
cggtcatgta gtgaaagtgt tgcaaatttg ctgaccccag aagcaatggc cccgtccatg
                                                                  1020
acactgettt tgetgeeage atttgagaet getgaatgtg gaaggetgtt ggaeegtgge
                                                                  1080
agaggaggcg gcacagagtt cccgggtgtt gtaacactgt tcccattgct tccagcagga
                                                                  1140
ggactcgtgg cattcatgac atttgtgtgt gtccttgctc ttgagagggg ttggtgaggg
                                                                  1200
aaaaggatat cttctgtaag gtcccataaa cagagctgtg tgtcctggcc cacggaacca
                                                                  1260
aaccgatacg tgacacttac ggggcggctg tctgtagagt tccgtctgga gagcctgcac
                                                                  1320
tgtgtactat ctgctcgatc tctgccaaaa tgaagaaggt cttggaagtc ctcatcgctg
                                                                  1380
ccactaaact ccatagggtc accttcttct acactagtgg tataagggtc aaacgctaca
                                                                  1440
acactgaccc aggactctgt gcccgtgcgt actggctatt actcggcagt ctacaaagga
                                                                  1500
ccagactgtc accaagtcgt
                                                                  1520
```

```
<210> 3468
```

<211> 3999

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (4002)...(1682)
<223> similar to gi3327128 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3468 tttttttgag ctgtagcact tttattgttc cttgtctctc tacccctgcc cagggtaagg 60 gcaaacgcct tccaagctgt ccaagggcac ccgcctggcc tggttaggtt ctcctagttg 120 cctgcagagg aatgactcca catggggctg gggagagaag ggggtaccac cttcctctc 180 cctggcagag cctggacacc agtacacaaa gagctgggcc cccaggttct gccctaccct 240 ttctgggcct tggttagggc tgtcttggcg gcaagaaggt gggggtcagc taggggtggg 300 gcacagcgtg gcacctgaag ggaatgctgg gatttgggat agaaggtggg atgtctctta 360 tggggaagag gaaagaaaga ggcttctgcc gaggctgaca tggaacttgc tgagatgggc 420 agaggcaagc tgggcagagg gcaggaagga ggagggacag gctggaggaa ggcagtgttg 480 gtgaagtggg gaggaaagga actggtagaa acagggctgt tcaagagaga caaacatggt 540 ccagtggcag gagagaggag aagcctggca agaaggggcg tagaaaggtg ggaacagctg 600 accaggagca getgatetga gecaagcagt tecagggett tecagecetg ggtgtgetet 660 accectecce teccecatee ecacetecta egtateceag gaccegttge caceceaagt 720 cctggaaagc ctcccatagg tgtggcttaa cccatcagct cccaggcgcc ctcaccctcc 780 tgccgctgcc cagttggctt tactcaccct ctaccagcag ccgtgtgtgg gtgctgtcct 840 ggccggcctg agcagcagta agtgccttgg tccttaaggt caaacgtcat ggatgaccag 900 gctgtgggtg gggccgtggc tgcgcattta atacttattt cccgggcaca gttcggcccc 960 ctcccgcagc cagcacacgt ggcccccccg agcgggacac agtcaccttc cagcaccgcc 1020 cggcggccca ccagaacggt cttctcgcga ggggggtggc ggcacatctg gagaggcaat 1080 gcctccactt ccagtagagc cagggactgg gcgggccccg cctggaagcg gacttcaccg 1140 gegteetegg egegeagete getaageace agaatgtgtt tetteeette etgteggatg 1200 cggacgcggg ctccgggtct cagcgggcgg cctccgagct cccagcgccc cgtggtctcg 1260 acctecgaea egggtgeact egaaegtage geegtegeet tegegggege teacegaeeg 1320 cagctcggag agtaccgcca cagtacgctc tggggcggag cccgggggcgt gagcgggggg 1380 gggcagaggg cagttaccgg tcacgcccc tccacgcccc ctttctagaa gcacgcgcgg 1440 tcatcagggt ccggggaaga cagctccgca agtctcgcgc ccaaagcagt gcccagcctc 1500 cacatcaccc cgtacccacc gcgcacggtc aggcggaccg gtccggcgcg ggccgtcccc 1560 accgcgcagc tgtaggtccc ggcgtccgag gggccgcagc gtcgcagctg gagaaggcgg 1620 cgcgtgccga gggcctggag ccggagccgc gggctaggcg taagcgcgtt cccgtcgcct 1680 cacgctgagc ctggccaggg tgcgatcgtg gtggctctcg cagccgtagg tgccctggtc 1740 ggccagtatg acaccatgga tgaagaggcg gtggatgtgc ccatcctggg ccatggacag 1800 gegagagteg tggggeaggg getgeecace tegeaceeag egeaeggeee eegetgeace 1860 cactoggeet gtetecaett cgagacaeac gteetggeet teetetgeee geacateetg 1920 caaccgccgt aggaacagca gctctgtctc tggggccctg gagtgacgac ggccccattg 1980 egeagecagg tgacategge atetggtggg gagaetteae aceggaaegt ggeateateg 2040 ccctcgtgga cagtgagtgg tgtcaggtcc gagaccagct tcaccagcag tggctcttcc 2100 acgetgaeaa ggaagatgeg getgteetgg ggegeatege acaggtaete eecagegtee 2160 ccgctccgtg ccccctgcac ccgcagcacc tgcctggccc cggcctgctc cagctgcacc 2220 cgcccctggc ttgccagtcg ctccccgtcc ttgtaccagc gtacagggcc ccctggcccg 2280 gagaggtgca ccaccagctc taggtccccg cctggggtgc tccgaaccct cgtctgggct 2340 gcctcgggag ctaccacccg cacagggggc tcagccacct ggacggtgaa gctqaqqctt 2400 ggggctccgg gggctgctcc agactggcag gtgtagagcc ctgcatgggc tgggcctgca 2460 gcctggatgc agaggactcg gcgggggccc tcggcatgga gctctaggcc ctcgcctcc 2520 tgcacgggcc tcccattgtg gctccagacc acgggggcgc cagcccggga cagttcacag 2580 ctcagcacca ctggctcccc aggggccaca cagagcgggc ttggagttgt ctctagagca 2640 aggaactgca ctggaggctc tgtgacagtg acagtgaaga aggccgagtc atctccagca 2700 tcacatacaa actcgccccc gtcctcgggc tgagcaqcag gtagcaccag gcqqcaqcqt 2760 ggcccatccc tctccagcac cagggcctcg ctctcctcca cttccagccc atccttgtac 2820

```
cagcgcacag gggcatcctc ccgagacagt tcacacatca gcaccacaca ctccaaggtc
                                                                     2880
acggcgatca aggtcacctc atcgcgaggg tatatgatcc gcactggggg ttctgtgacg
                                                                     2940
gtgacagtga aggaggccga ctcatcgtca atttcacaca agtactcgcc ggagtcctcg
                                                                     3000
agctggacag cgggcagcac caggcggcgg acagtgtctt ccttctgcag gagcagcgcg
                                                                     3060
gggctctcca ccacctcctc tccatccttg gtccagcgca cctctgccca gggccggcat
                                                                     3120
ageteacagg teageaceae aegeteeagg egeacggetg ceaeatacae ettgeegetg
                                                                     3180
ggatacacga tccacgagga gacgtctgtg atggtgacag tgaagtaggc acactcatct
                                                                     3240
ccagcgacgc actgaaactc gccccgtct gagggctggg tggcgggcag caccaggcgg
                                                                     3300
cgatggggcc cctcattctc cagcaccacg aagtcactct cctccacctc ctgcccgtcc
                                                                     3360
ttgtaccaac gcacaggggc gtcctcttcg gttccacctc acaggccagc atgacacact
                                                                     3420
cggaagttat ggcatgcacg aacacatgtt ctcgggggtc cacgatgtgc acgggaggat
                                                                     3480
cttggacagt gacgccgaag aaggccgaga ccccttctgt cctgcactca aactcgccac
                                                                     3540
tgtcctggac tttggcctca ggcaggatca gacggtgttt gcgcccatcc atcttcacca
                                                                     3600
ccagcaacte geteteetee acettetgee cateettgta ccaggttgee gggaagteea
                                                                     3660
cccttgagag ctcacaagtc agcaccaccc gctctgaggt tgtgaaggtc aacgacacct
                                                                     3720
tgtcctgggg gctcaggatg tgcaccgggc tctcttggat tgtgagggca gctgagtcct
                                                                     3780
gcacgccggg gcagctgaag ccgaccaggg caccgctgtc ctggtgcttg acggcatgca
                                                                     3840
ggatgagtct gtgctgcaga cccttctgct ctatacggta ccgcagggcc ccaggttcca
                                                                     3900
cctggccctc cggctcgtta ctcttgagct cttccccatt aaggaaccag gtaccctgga
                                                                     3960
tgatggtgga gagatcgagg gagaagacgg catcttccc
                                                                     3999
```

```
<210> 3469
<211> 2493
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1790)
<223> similar to gi5733824 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3469
atggccgaga gtggtgaaag cggcggtcct ccgggctccc aggatagcgc cgccggagcc
                                                                       60
gaaggtgctg gcgcccccgc ggccgctgcc tccgcggagc ccaaaatcat qaaagtcacc
                                                                      120
gtgaagaccc cgaaggaaaa ggaggaattc gccgtgcccg agaatagctc cgtccagcag
                                                                      180
tttaaggaag aaatctctaa acgttttaaa tcacatactg accaacttgt gttgatattt
                                                                      240
gctggaaaaa ttttgaaaga tcaagatacc ttgagtcagc atggaattca tgatggactt
                                                                      300
actgttcacc ttgtcattaa aacacaaaac aggcctcagg atcattcagc tcagcaaaca
                                                                      360
aatacagctg gaagcaatgt tactacatca tcaactccta atagtaactc tacatctggt
                                                                      420
tctgctacta gcaacccttt tggtttaggt ggccttgggg gacttgcagg tctgagtagc
                                                                      480
ttgggtttga atactaccaa cttctctgaa ctacagagtc agatgcagcg acaacttttg
                                                                      540
tctaaccctg aaatgatggt ccagatcatg gaaaatccct ttgttcagag catgctctca
                                                                      600
aatcctgacc tgatgagaca gttaattatg gccaatccac aaatgcagca gttgatacag
                                                                      660
agaaatccag aaattagtca tatgttgaat aatccagata taatgagaca aacgttggaa
                                                                      720
cttgccagga atccagcaat gatgcaggag atgatgagga accaggaccg agctttgagc
                                                                      780
aacctagaaa gcatcccagg gggatataat gctttaaggc gcatgtacac agatattcag
                                                                      840
gaaccaatge tgagtgetge acaagageag tttggtggta atceatttge tteettggtg
                                                                      900
agcaatacat cctctggtga aggtagtcaa ccttcccgta cagaaaatag agatccacta
                                                                      960
eccaatecat gggetecaca gaetteccag agtteateag ettecagegg caetgecage
                                                                     1020
```

```
actgtgggtg gcactactgg tagtactgcc agtggcactt ctgggcagag tactactgcg
                                                                     1080
ccaaatttgg tgcctggagt aggagctagt atgttcaaca caccaggaat gcagagcttg
                                                                     1140
ttgcaacaaa taactgaaaa cccacaactt atgcaaaaca tgttqtctgc cccctacatq
                                                                     1200
agaagcatga tgcagtcact aagccagaat cctgaccttg ctgcacagat gatgctgaat
                                                                     1260
aatcccctat ttgctggaaa tcctcagctt caagaacaaa tgagacaaca gctcccaact
                                                                    1320
ttcctccaac aaatgcagaa tcctgataca ctatcagcaa tgtcaaaccc tagagcaatg
                                                                    1380
caggccttgt tacagattca gcagggttta cagacattag caacggaagc cccgggcctc
                                                                    1440
atcccagggt ttactcctgg cttgggggca ttaggaagca ctggaggctc ttcgggaact
                                                                    1500
aatggatcta acgccacacc tagtgaaaac acaagtccca cagcaggaac cactgaacct
                                                                    1560
ggacatcagc agtttattca gcagatgctg caggctcttg ctggagtaaa tcctcagcta
                                                                    1620
cagaatccag aagtcagatt tcagcaacaa ctggaacaac tcagtgcaat gggatttttg
                                                                    1680
aaccgtgaag caaacttgca agctctaata gcaacaggag gtgatatcaa tgcagctatt
                                                                    1740
gaaaggttac tgggctccca gccatcatag cagcatttct gtatcttgaa aaaatgtaat
                                                                    1800
ttatttttga taacggctct taaactttaa aatacctgct ttatttcatt ttgactcttg
                                                                    1860
gaattetgtg etgttataaa caaacccaat atgatgcatt ttaaggtqqa gtacagtaag
                                                                    1920
atgtgtgggt ttttctgtat ttttcttttc tggaacagtg ggaattaagg ctactgcatg
                                                                    1980
catcacttct gcatttattg taatttttta aaaacatcac cttttatagt tgggtgacca
                                                                    2040
gattttgtcc tgcatctgtc cagtttattt gctttttaaa cattagccta tggtagtaat
                                                                    2100
ttatgtagaa taaaagcatt aaaaagaagc aaatcatttg cactctataa tttgtggtac
                                                                    2160
agtattgctt attgtgactt tggcatgcat ttttgcaaac aatgctgtaa gatttatact
                                                                    2220
actgataatt ttgttttatt tgtatacaat atagagtatg cacatttggg actgcatttc
                                                                    2280
tggaaacata ctgcaatagg ctctctgagc aaaacacccg gtaactaaaa aaagtgaaga
                                                                    2340
taagaaatac cccttaaagc tgagtaattc ctaattggta tggaatctaa cagcatcttt
                                                                    2400
gacaaacatc tcccagcaaa agtgccggtt agtcaggttt gttgaaaata cagtagaaaa
                                                                    2460
gctgattctg gttatctctt taaggacaat taa
                                                                    2493
     <210> 3470
     <211> 373
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
     <222> (3)...(330)
     <223> similar to gi5326854 in the genepept database release 114,
```

```
<400> 3470
gcctcataaa actctgcaaa tctaaggcca aaagctgtga aaatgacctt gaaatgggca 60
tgctgaattc caaattcaag aagactcgct accaggctgg catgaggaat tctgaaaatc 120
tgacagcaaa taacactttg agcaagccca ccagatacca ggcgagctga aggaaatcaa 180
gcaagatatc tccagcctgc gctatgagct tcttgaggaa aaatctcaag ctactggtga 240
gctggcagac ctgattcaac aactcagcga gaagtttgga aagaacttaa acaaagacca 300
cctgagggtg aacaagggca aagacattta gcagcccaca tcggcgtctg tgacttctac 360
cagcattcca agg
```

Run with FASTXY 3.3t00, default parameters

```
<210> 3471

<211> 6076

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3242)

<223> similar to gi3947688 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 3471 cctccaggcc cagaacggag ccgccttggc ctcggggtct ccctacacca acggtcctgt 60 ccaaaatgca ttgctgtctt cacaagagtc agtgagccaa ggatacaatt tccagcttcc 120 aggatcctac cctcatccaa taccagcaaa gactttgaat ccagtctctg gacagtctaa 180 ctatggtggt tctcagggat ctgggcagac tcttaataga ccacctgtgg cctctaatcc 240 agtgacacct tcgcttcata gtggtcctgc tccccgaatg ccattacctg cttctcagaa 300 cccagctact acaccaatgc cttctagtag ctttcttcct qaaqccaacc tqccaccacc 360 tttgaattgg caatataact atccatccac agcctcacaa acaaaccatt gtcctcgtgc 420 atcatcccaa ccaactgtat ctggaaatac aagtttaacc acaaatcatc aatatgtttc 480 ttctggatat ccttcacttc aaaatagctt cataaagtca ggtccttctg tacctccctt 540 agtgaatcca cctctgccta caacttttca accaggagct cctcatgggc cccctccagc 600 tggaggccca cccccagtga gggccctcac gcccctgaca tcatcatata gagatgtacc 660 ccagccctta tttaattcag ctgtcaacca agaaggtatt acatcaaata ccaataacgg 720 atctatggtg gtccacagta gttacgacga gattgaagga ggtggcttat tggcaacacc 780 acagcttact aacaagaatc ccaaaatgag ccgaagtgtt ggatattcat atccctcctt 840 accacctggt tatcagaaca caacaccacc tggtgcaact ggagtaccac cctcttcctt 900 gaattaccca agtgggccac aagcetttac teagactece ttaggtgeta atcatttaac 960 cacaagcatg agtggattaa gtctacaacc agagggtcta agagttgtca atcttcttca 1020 agaaagaaac atgetteegt caacacettt gaageeteea gtteeaaatt tgeatgaaga 1080 catccagaaa ctcaactgta acccagagtt atttcgatgc acgctgacta gcattcctcc 1140 agacgcaggc cttattgaat aaagccaaac ttcctttqqq qctqctqctt catcctttca 1200 aagacttagt gcaattgcct gtggttacct ccagtacaat tgtgagatgc cgttcatgca 1260 ggacgtacat caatcettte gteagettte ttgateaaag gagatggaag tgtaaettat 1320 gttatcgagt caatgatgtt cctgaagaat tcttgtacaa ccctttgacc agagtttatg 1380 gagaacctca cagaagacca gaagttcaaa atgctactat tgagtttatg gctccttcag 1440 aatacatgtt acgaccacct cagcctccag tgtatctctt tgtatttgat gtgtctcaca 1500 atgcagtcga aactggatac ttgaattcag tttgccagag tttgttagac aatctggatt 1560 tgcttcctgg caacactaga acaaaaattg gcttcataac atttgacagt acaatccatt 1620 tctacggtct tcaggaaagt ctctctcaac ctcagatgct aatagtttca gatattgaag 1680 atgtttttat acctatgcca gagaacttat tagtaaactt aaatgaaagt aaagagctcg 1740 tgcaagattt actgaaaact ttgccacaaa tgtttaccaa gactctggag acccagagtg 1800 ccttgggtcc tgcactgcag gctgccttta agctgatgtc tccaactggt ggtcgaatgt 1860 ctgtctttca aacacaactc ccaactcttg gagtgggagc cctgaaacca cgagaggaac 1920 caaaccacag gtcatctgct aaggatatac acatgacacc atccactgac ttctataaga 1980 aattagcctt ggactgttct ggtcagcaag ttgctgttga cttattcctt ctcagtggac 2040 agtattctga tttggcttct ctgggttgta tttctcggta ttcagcaggt agtgtctatt 2100 actatecete ttaccateat cageacaace cagtecaagt acagaaatta cagaaggaac 2160 tacagagata ccttactcgg aagattggct ttgaggcagt catgaggatt cggtgcacca 2220 aaggtettte catteataet tteeatggaa aettetttgt taggteaace gaettaetgt 2280 ctttgcctaa cgtcaaccca gacgctgggt atgcagtaca gatgtcagtg gaagagagtc 2340 ttactgacac tcagttggtt tcttttcagt cagcactctt gtatacatcc agcaaaggcg 2400 aaagaagaat togtgttoat actttgtgtt tgocagtagt ttogactotg aatgatgtot 2460 ttcttggagc tgatgttcaa gcaatttcag ggttattggc caatatggct gttgacagat 2520

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```
agtttgtaat tttcactgtt ttattcctgt taaaaaaaaa aaaaagtcaa ttggtaccca 6000 tggagaccca tggttgaatc tatgctaact tatcaacttg gctattcaat aaagttaatt 6060 gaaaagaaaa aaaaaa 6076
```

```
<210> 3472

<211> 1492

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1495)...(80)

<223> similar to gi4689256 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
cagggtgctg tgtggtcccg caaagaggca gctgagcttg ggcctcaggt cgttccacac
                                                                     180
cttgctcatc tccttgtgcc cttggatctg agagttgacg aaggcgcgga ggatgtggga
                                                                     240
ggtgagggc aggtagacgt ggatgagctg cgtctcctgg tgcaggcagt acagggagaa
                                                                     300
gtagttccgc agctccatcg tctgaatcgc gttctcctgc tccacgatgc gggactccaq
                                                                      360
ctgctccacg gactccgggc tcgcgggttc tgcgccggtg gcgctcatca tctgcctctt
                                                                      420
catcaggctg tactttgtgc aagggcccgc tggtgctttg tgcaacacgc ccttctcatg
                                                                     480
gccgcttcgc acaggtcctt aataggactg gcagcagatc caagaagagg ttcagcttct
                                                                     540
ccaccaacgt cgttctcctc cctgcttacc ctgttgtgca gccttgtcgg cgaagcagcg
                                                                     600
caaatttcca cagacaggcc tttcagagcc tgcttcaggg accccccacg tgcttgctat
                                                                     660
tcagagcggc ccaggagggc agcggggtcg tgtcagaccc tattgcactt agctccttcc
                                                                     720
cgaatatgag aagatctgcc gcattgtcga tggcccgcga cgcgatccgc tcggccctgt
                                                                     780
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                                                                     840
ctgagcctgg atgtcagctg ggaggaagtc cttggccctg gtagccagct tacagttcag
                                                                     900
gaattcgtcc ccgacgcact gtgctgactc ctttaacttg ttcctgcaac atcccgaacc
                                                                     960
cgctgaaagg aacaaggaaa aagcttgaag gaaccacatc cctcggaaga acagggggtg
                                                                    1020
tcgcgcccac ccaggttgac gaagcgcttc agggctctcc tcctggcctc gatgaactcc
                                                                    1080
ctgtcagctc ccagcattct cttgggtggc agggcaggca ccatacggta ggggaacttg
                                                                    1140
tgcaggagca tctcctggaa gaccacgaag tcattgtacc gtctgtatac cgaggacttg
                                                                    1200
aagcgctggc tggaaacctc atactccaca tgcttcagga agaggccctt cttctccqqa
                                                                    1260
atgageteca cetgeaeggt gteeetggee ageageteet geagggtgtg ggaeageage
                                                                    1320
agcgggttcc cctgcggcat ctgcattcga ctgggggctg ggacctgctg cacgatggcc
                                                                    1380
tggggctcga tggcctgggg tgtcggcaga tctgacgccg ggggatccqc ctcctcqtca
                                                                    1440
gcctccgcct cagctgccgc cccgactgca gccgcgggca gcgggtccat cg
                                                                    1492
```

<210> 3473

<211> 4696

<212> DNA

<213> Homo sapiens

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<220>
<221> misc_feature
<222> (1)...(4492)
<223> similar to gi2815888 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3473 ccgagccctg aggcaggcgg cggcggagga gccctcaagg cgagcagcgc gcgcgcggct 60 gccgcgggac tgctgcggga ggcgggcagc gggggccgcg agcgggcgga ctggcgggg 120 eggeagetge geaaagtgeg gagtgtggag etggaceage tgeetgagea geegetette 180 cttgccgcct caccgccggc ctcctcgact tccccgtcgc cggagcccgc ggacgcagcg 240 gggagtggga ccggcttcca gcctgtggcg gtgccgccgc cccacggagc cqccaqccqq 300 egeggegeee acettacega gteggtggeg gegeeggaea geggegeete gagteeeqea 360 gcggccgagc ccggggagaa gcgggcgccc gccgccgagc cgtctcctgc agcggccccc 420 gccggtcgtg agatggagaa taaagaaact ctcaaagggt tgcacaagat ggatgatcgt 480 ccagaggaac gaatgatcag ggagaaactg aaggcaacct gtatgccagc ctggaagcac 540 gaatggttgg aaaggagaaa taggcgaggg cctgtggtgg taaaaccaat cccaqttaaa 600 ggagatggat ctgaaatgaa tcacttagca gctgagtctc caggagaggt ccaggcaagt 660 geggetteae cagetteeaa aggeegaege agteettete etggeaacte eccateaggt 720 cgcacagtga aatcagaatc tccaggagta aggagaaaaa gagtttcccc agtgcctttt 780 cagagtggca gaatcacacc accccgaaga gccccttcac cagatggctt ctcaccatat 840 agccctgagg aaacaaaccg ccgtgttaac aaagtgatgc gggccagact gtacttactg 900 cagcagatag ggcctaactc tttcctgatt ggaggagaca gcccagacaa taaataccgg 960 gtgtttattg ggcctcagaa ctgcagctgt gcacatggaa cattctgtat tcatctgcta 1020 tttgtgatgc tccgggtgtt tcaactagaa ccttcagacc caatgttatg gagaaaact 1080 ttaaagaatt ttgaggttga gagtttgttc cagaaatatc acagtaggcg tagctcaagg 1140 atcaaagete catetegtaa caecatecag aagtttgttt caegeatgte aaatteteat 1200 acattgtcat catctagtac ttctacatct agttcagaaa acagcataaa ggatgaagag 1260 gaacagatgt gtcctatttg cttgttgggc atgcttgatg aagaaagtct tacagtgtgt 1320 gaagacggct gcaggaacaa gctgcaccac cactgcatgt caatttgggc agaagagtgt 1380 agaagaaata gagaaccttt aatatgtccc ctttgtagat ctaaqtggag atctcatgat 1440 ttctacagcc acgagttgtc aagtcctgtg gattcccctt cttccctcag agctgcacag 1500 cagcaaaccg tacagcagca gcctttggct ggatcacgaa ggaatcaaga gagcaatttt 1560 aaccttactc attatggaac tcagcaaatc cctcctgctt acaaagattt agctgagcca 1620 tggattcagg tgtttggaat ggaactcgtt ggctgcttat tttctagaaa ctggaatgtg 1680 agagagatgg ccctcaggcg tctttcccat gatgtcagtg gggccctgct gttggcaaat 1740 ggggagagca ctggaaattc tgggggcagc agtggaagca gcccgagtgg qqqaqccacc 1800 agggggtttt cccagaccag tatctcagga gatgtggtgg aggcatgctg cagcqttctq 1860 tcaatggtct gtgctgaccc tgtctacaaa gtgtacgttg ctgctttaaa aacattgaga 1920 gccatgctgg tatatactcc ttgccacagt ttagcggaaa gaatcaaact tcagagactt 1980 ctccagccag ttgtagacac catcctagtc aaatgtgcag atgccaatag ccgcacaagt 2040 cagctgtcca tatcaacact gttggaactg tgcaaaggcc aagcaggaaa gttggcagtt 2100 ggcagagaaa tactaaaagc tggatccatt ggtattggtg gtgttgatta tgtcttaaat 2160 tgtattcttg gaaaccaaac tgaatcaaac aattggcaag aacttcttgg ccgcctttgt 2220 cttatagata gactgttgtt ggaatttcct gctgaatttt atcctcatat tgtcagtact 2280 gatgtttcac aagctgagcc tgttgaaatc aggtataaga agctgctgtc cctcttaacc 2340 tttgctttgc agtccattga taattcccac tcaatggttg gcaaactttc cagaaggatc 2400 tacttgagtt ctgcaagaat ggttactaca gtaccccatg tgttttcaaa actgttagaa 2460 atgctgagtg tttccagtgt ttccactcac ttcaccagga tgcgtcgccg tttgatggct 2520 tatgcagatg aggtggaaat tgccgaagcc atccagttgg gcgtagaaga cactttacaa 2580 cgacaacaac acaacagctt ttgcaggcat ctgttcccaa caactatctg qaaaccacag 2640 agaacagttc cccttgagtg cacagtccat ttagagaaaa ctggaaaagg attatgtgct 2700 acaaaattga gtgccagttc agaggacatt tctgagagac tqgccaggat ttcagtagga 2760

```
ccttctagtt caacaacaac aacaacaaca acaacagagc aaccaaagcc aatggttcaa
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ttaatgtttc cagcettgtc aaccecttct tettetaccc catetgtacc agetggcact
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tctcctcaaa cacagcgcaa gttttctcta caattccaca gaaactgtcc tgaaaacaaa
                                                                     3060
gactcagata aactttcccc agtctttact cagtcaagac ccttgccctc cagtaacata
                                                                     3120
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gcatctatgc cttcaagtga tacaacagta acttttaagt cagaagttgc tgtcctgtct
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cctgaaaagg ctgaaaatga tgatacctac aaagatgatg tgaatcataa tcaaaagtgc
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aaagagaaga tggaagctga agaagaagaa gctttagcaa ttgccatggc aatgtcagcg
                                                                     3540
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attattcaac aggatacacc agagactcta ccaggacata ccaaagcaaa acaaccgtat
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agagaagaca ctgaatggct gaaaggtcaa cagataggcc ttggagcatt ttcttcttqt
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agaaacacat cttctgagca agaagaagta gtagaagcac taagagaaga gataagaatg
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cctgaggtac taagaggtca acagtatgga aggagctgtg atgtatggag tgttggctgt
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gctattatag aaatggcttg tgcaaaacca ccatggaatg cagaaaaaca ctccaatcat
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cttgctttga tatttaagat tgctagtgca actactgctc catcgatccc ttcacatttg
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tetectggtt tacgaagatg tggetetteg ttgtttaaga acttcaacet caggacagae
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ctccatcaag agagctactg aagcatccag tctttcgtac tacatggtag ccaattatgc
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agatcaacta cagtagaaac aggatgctca acaagagaaa aaaaacttgt ggggaaccac
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attgatatct acggccatga tgccactgaa cagctatgaa cgaggccagt ggggaaccct
                                                                     4620
tacctaagta tgtgattgac aaatcatgat ctgtacctaa gctcagtatg caaaagccca
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aactagtgca gaaact
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```

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<210> 3474
<211> 2915
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2202)
<223> similar to gi1657752 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3474

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aaaaatatgc actaactaac atccaggcgg ccatgggcct ctcggatcca gctgcacagc 180
ccctgctggg aaatggctct gccaacatca agctggtgaa aaatggggag aaccagctcc 240
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```
gtaaggctgc agagcaaggg cagcaggacc ccaacaaaaa cctgagcccc actgcagtca
                                                                      300
tcaacataac ttctgagaag ttagagggta aagagcccca cccacaggat tcctcgagct
                                                                      360
gtgagatttt accctcccag cccaggagaa ctaagagctt tctaaattac tatgcagatc
                                                                      420
tggaaacctc agccagagaa ctagagcaga accaaggcaa tcaccatggg actgcggaag
                                                                      480
agaaatccca gccagtccag ggccaggcct ccaccatcat tgggaatggc gatttgctgc
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tgcagaaacc aaacagaccc cagtccagcc ctgaagacgg ccaagtagcc acagtgtcat
                                                                      600
ccagcccaga aaccaagaag gatcatccga aaacaggggc caaaaccgac tgtgcactgc
                                                                      660
accggatcca gaacctggca ccgagcgatg aggagtccag ctggacaacg ttgtcccaag
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acagtgcctc acccagctcc ccggatgaaa cagatatatg gagtgatcac tcatttcaga
                                                                      780
ctgatccaga tttgccgcct ggctggaaaa gagtcagtga cattgccggg acctattatt
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ggcacatccc aacaggaacg actcagatgg gaacggcccg tctccatccc agcagatctc
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cagggttcta ggaaagggtc acttagttct gtaacgccat ctcccacccc agagaacgag
                                                                      960
aaacagccat ggagtgattt tgctgttctg aatgggggaa agattaatag tgacatttgg
                                                                     1020
aaggatttgc atgcagccac tgttaacccg gaccccagtt taaaagaqtt tgaaggagca
                                                                     1080
accctacgct atgcatcttt gaaactcaga aatgccccac accctgatga tgatgattct
                                                                     1140
tgtagtatca acagtgaccc agaagccaag tgttttgctg tgcgttctct gggatgggta
                                                                     1200
gagatggcag aagaggacct cgcccccggt aaaagtagtg ttgcqgtcaa caactgcatc
                                                                     1260
aggcaacttt cctactgcaa aaatgacatc cgagacacag tcgggatttg gggagagggg
                                                                     1320
aaagacatgt acctgatcct ggagaatgac atgctcagcc tggtggaccc catggaccgc
                                                                     1380
agcgtgctgc actcgcagcc catcgtcagc atccgcgtgt ggggcgtggg ccgcgacaat
                                                                     1440
ggccgagaga gggattttgc ttatgtagca agagataaag atacaagaat tttgaaatgt
                                                                     1500
catgtatttc gatgtgacac accagcaaaa gccattgcca caagtctcca cgagatctgc
                                                                     1560
tccaagatta tggctgaacg gaagaatgcc aaagcgctgg cctgcagctc cttacaggaa
                                                                     1620
agggccaatg tgaacctcga tgtccctttg caagtagatt ttccaacacc aaaqactgag
                                                                     1680
ctggtccaga agttccacgt gcagtacttg ggcatgttac ctgtagacaa accagtcgga
                                                                     1740
atggatattt tgaacagtgc catagaaaat cttatgacct catccaacaa ggaggactgg
                                                                     1800
ctqtcaqtga acatqaacgt ggctgatgcc actgtgactg tcatcagtga aaagaatgaa
                                                                     1860
gaggaagtet tagtggaatg tegtgtgega tteetgteet teatgggtgt tgggaaggae
                                                                     1920
gtccacacat ttgccttcat catggacacg gggaaccagc gctttgagtg ccacgttttc
                                                                     1980
tggtgcgagc ctaatgctgg taacgtgtct gaggcggtgc aggccgcctg catgttacga
                                                                     2040
tatcagaagt gcttggtagc caggccgcct tctcagaaag ttcgaccacc tccaccgcca
                                                                     2100
gcagattcag taaccagaag agtcacaacc aatgtaaaac gaggggtctt atccctcatt
                                                                     2160
gacactttga aacagaaacg ccctgtcacc gaaatgccat agctgcacat gcaaaaggac
                                                                     2220
tcqqctattt acctqaaqat tqactaqcta cactaaaqaa aatqaactcc qccatccqac
                                                                     2280
cttccatcca gttgctgatg ctttgtcttc agagaattta cccttaacca agcagtgtta
                                                                     2340
gacaagcatg ttctctcggt cttgccaccg atcatgtgat atgaaaagaa gcatgaataa
                                                                     2400
ttttttttgc tgtaagttac atcatgcgca gtggaaggtc tttttcttat tgtaaatatt
                                                                     2460
gtgaacatta cttaacttca cacacacaca gagaagagtg tggccccacc cctcctagtg
                                                                     2520
aactaacgct gcgtccttgg aatgaatgat gcgtgagtta gtttcactgt cttcttggct
                                                                     2580
ggacctgtca caagcaacct ttaagtccta cagcactttg ccctgttttc aacattggag
                                                                     2640
taggcactgc atagcagata ccattgaatt gctgtaaaaa taggatggcg agtttgtgtt
                                                                     2700
ttaatttttc ataaaattga acctgttggt tgacaaaatt ggctgttggc atcagtatag
                                                                     2760
aaaccaactg gcagctttcc ctgacaagct ctttgacaca tggacaccat ttcatgtcta
                                                                     2820
cagctgtttg tgggatgttg gaaaaaaatg aaacttcaaa attgatgaaa aactaaattc
                                                                     2880
gaggaattaa aatcgaacaa aacataaaaa aaaaa
                                                                     2915
```

```
<210> 3475
<211> 2429
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (2405)...(719) <223> similar to gi4510377 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3475
ataacaaatt ttcccattcc caaggtttta aaaaacgccc ccggcccaaa ctttaaaatc
                                                                       60
ccccccata aagaaaaaa tattatttt cctcccccg taaaacttgg gccccccaag
                                                                      120
gattetttaa aacegeeece eetttttttt ttttttgaga tttaacattg tacattttat
                                                                      180
taaatactgg actttattac aacaaattaa tttacttccg atagaagttt cattttaaaa
                                                                      240
aatgtggttg tgttcaaatt cttaattgac acttgttttg gggtaaacat cctattttta
                                                                      300
ctggtggtat catcaatcat tatgagcaga aagattaatt ttgtaccaca gaacaaagga
                                                                      360
atttctcaag tgggtacaat acttcaatat atataaaggg gaatatactc cccaaaggag
                                                                      420
tggggcatga ccacagcaga gtatatgatc agagaacata ttgcttttat ggtatatata
                                                                      480
tatatatata tatatctcta catataacat caagtcatgc acattaagtc tttactacct
                                                                      540
actgaagget tetacettae acatgaaaat tgtteatgte eeagggtttg geateeagee
                                                                      600
aaaatttaaa caatgatgaa gaatgqctqt caaactqqct tttcagacca cccctgaaaa
                                                                      660
gctgtcagct gtaatatcca tcctggaatc gtggcggaaa gttcctggga gttgcctttt
                                                                      720
cctgtgtttt gatcaagtct ataatagctg acagtactgc acagtctctg gatttagtgt
                                                                      780
cattccagtc tacaggatga ggactttcaa tcttctcttg cagaagaata tctagttcct
                                                                      840
ttcttaattc cttaacaaga tgggcaattc ttgctggaga ctgaaataca atccactcat
                                                                      900
ctacagcaat agtttcctga tcgttatcct tctggatgga aatgtcacct ccaaaaaaca
                                                                      960
agagacagta tggggaaacc tctgtgcagt catacaagta tatactgctt gttctcatct
                                                                     1020
ttaggtgata gataagccag ttgtagtgaa agtctgtttg ctccacatta acaqatttag
                                                                     1080
gatgaacagc aaccaggcca tcggtttttg tgtaaacttt taccattttt ctttttttac
                                                                     1140
ccaaatttag tcgaatttta gcaactttgg gatataaacc agcacaqatg acagctttaa
                                                                     1200
ttatcttctc attatctgaa tttatattag attctggatc tttaggattt ctactgctta
                                                                     1260
caaatccagc tccaagaaga tgctcagcaa actgtccttt catgttatgc agcatctgca
                                                                     1320
gtgtgtttga agacagaaaa tattcccagc aatagtcctt ttcgtatctg aaaccacgtc
                                                                     1380
gcctagcctc ttcccagccc tcaaacgcat tcacaactgt taagtgatca cttctagtat
                                                                     1440
cctttgccaa ttcctttctt cttgcatctg caatcttttc ttttcccagt ggaatgacaa
                                                                     1500
atggatcttt gaaactgaga ctagcagcaa tagtgagtac tgggtctaag cagcagaaca
                                                                     1560
gtgctccaaa aagaatcatt tttccaatat gtggctcaac gggtaatcgt gccaagtgga
                                                                     1620
ctccaagagg tgtcaattct tcttgtttat ccaaagcgtt cagctccatc aggtgtctta
                                                                     1680
tggagagtaa cactgcctca tttgatggtg ggtccattaa tctactcaga aaataagcaa
                                                                     1740
ttccacctag ccttaaaatc tttatttgta aacaaagttc ttccaaagga gttctcaaaa
                                                                     1800
tttctggcag ttgatagtca tctagaagac ttgctctaag accattatac agatgatagc
                                                                     1860
aatgaccagg ttgaactctt ccagctcgac cttttctctg tttggcatta gctttactaa
                                                                     1920
cccactcagc ggacattgta ctgatattgt tctgagtatc aaaatgcgtc tcttttattt
                                                                     1980
ttcctccatc tatcacataa acgacatcat ctatggtaat gctagtctcc gcaatgttgg
                                                                     2040
tagcaattac tattttccga acaccaggag gggttctttt aaacacctgt gtctggttaa
                                                                     2100
ctgtaggcat cagtgaatgt aaaggtataa ttaaaaattt atctgattta aacattactt
                                                                     2160
gtgacatcaa gagatcatgt aaagtgctga tattgtccca gcctggcaga aagaccagta
                                                                     2220
tegeaceate etettettee aaaacaatgt ateggatgag ggeaacaate aaatteagat
                                                                     2280
caactttatc atcctccatc atttctataa catctacagt acttgcagaa taccttcttc
                                                                     2340
gcagttccct tacataatct ggccaacgtt ctttatatat tgcttctttt tcgaattcga
                                                                    2400
ccacacggac tagggatcta ctaatttta
                                                                    2429
```

<210> 3476

<211> 3973

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3975)...(1294)

<223> similar to gi4914601 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3476 ttttttttt tttccttttc ttcagagttt attttgaatt ttcatttttg gataaccaaa 60 cagctcttta agaagaatgc ccagaagagt ccttctggca cttttggata gtacataaga 120 ttttcttttt ttttttaaa tttttttaa tagtcacatt cagctcgctt gctcaaacca 180 gactcccaca ttgggtgagc aagatgagcc cataggattc cagagttaat acgtaaccgt 240 atatacaaac agccaaaaaa ccataatggt gccacaggga tggagcaggg aagggcatct 300 ctaacgtgtc ctctagtcta tcttcgctaa acagaaccca cgttacacat ggataactag 360 gagaggcaca ctgtgttgaa aacgagggat gctggacccc aaatggqcac ttgqqcaggc 420 atgccagttt aaagcaaaag agacatcctt taataactgt ataaaatcca ggcagttcca 480 ttaaaggggt taagaaaacc aacaacaaca aaaagcgagg gactgtctgt tgtcactgtc 540 aaaaaggcac ttggagttaa tgggaccagg attggaggac tcttagctga tacagatttc 600 agtacgattt cattaaaagg cttggatgtt aagagaggac actcagcggt tcctgaaggg 660 agacgctgag atggaccgct gagaagcgga acagatgaac acaaaggaat caaatcttta 720 caaccaaatt gcatttaagc gacaacaaaa aaaggcaaac cccaaaacgc aacctaacca 780 aagcaaaatc taagcaaaat cagacaacga agcagcgatg catagctttc ctttqaqaqa 840 acgcatacct tgagacgcta cgtgccaacc taagttctca acgacagctt cacagtagga 900 ttattgtgat aaaaatgact caagcgatgc aaaaagtttc atctgttccc agaatccgag 960 ggagaactga ggtgatcgtt agagcatagc gacatcacgt gcggtttctt aatgtccctg 1020 gtggcggata cgccgagtcc tcggaaggac atctggacac cactttcagc cacctccttg 1080 caggggcgac atccgccaaa gtcatccttt attccgagta ataactttaa ttcctttcta 1140 acatttacac ggcaaacagg aatgcagtaa acgtccacgt ccgtcccacg gctgggctgc 1200 cgttccgttt cctccacgaa cgggtacgcg cttccatgag aaaggatatt tggcaatttt 1260 atattccaca gtcaggtggg tctgcgatag ctcatttaat gttaaacgcc atcaggggcc 1320 tatctctacc gattctgcca ggggcttttc ttgtcttctc cttgqtcatc atcatcatcq 1380 tetteetett eetegtggge agatettete tggtggggge tggetgetgg eteegagggg 1440 geateegeag teegtetggt egteteetee tgeaggetgg geagetggee accaettete 1500 cgactcgacc cctccaacaa gcatcgcagg gcactgtcct cgggggtaca gaccgtggtc 1560 ccacattege taccactetg ttecaegtea tecaggtaca egagetgegt gtaggeegtg 1620 ctgtctgggg ctcgaggctc tttctgctgg tgctcttgga cgggcgggta gttctgctgc 1680 agagacaaag catctcccct tcccttccgg gctgattttg gttcattcat atctacgcca 1740 gagtccaaac tggcatcatt acttccgttc cttccagctc tttggagatc aatgtatgaa 1800 tgtctaacgt gagcgttgga cctgccatcc aaggagacga accacgcccg ggggtgcgga 1860 ageggettee caececcaag etecateagg geetttteag teaggagetg caecteactg 1920 ttcatctgag ccaaagccgc gtcgttcagg gaagctggga tggagagaga ctccgacatg 1980 gatgcgtttt gagggctcca ctcccgggtg cccgcatcct gcaggtgctg ctgagagatg 2040 gcctgggaag acaggggctg gggctggatc tgtgaggacg ggtgtgggaa gatcccqqca 2100 tggggattgg acageteage etgtagtett tetateteaa getgetgate ageegggaeg 2160 acgaggggct ggctgacata ggagtggtcc ccggggagtt tcatataatg agccgggatg 2220 accaaggcag gcagtacttt cctgtaaacg ctgtcattga cctggtcgac agaactgcag 2280 cagattaact ggccgggccg tgggaaggac gtaggtctct cgaggtgatc tactgatcgc 2340 gacatcatac attcagtggg tctgcggtcc agcagctgtt ctttctcagg tgatgaaggc 2400 gcggggtaca gatgtteetg aatggtgagt ttgetteeeg tggaggetgg acettetetg 2460 tcctgctttt caaataaagg ctgtgagagc acggtgttgt aactacccct gtagtcatca 2520 ttgcccgagg actcgtagcc ttctctttcc atagattttc ttgcctttaa gggaaaaacc 2580 tccactgact tatggtagtc tttccccagc gtcccacttg gagtgaggtt atcaaaggag 2640 atctggcttt tatcctcttc cttgcaagag aggagctcct cccgggagct aaattcctgg 2700

```
gaggtgctgt aggagagctt gagcatgggg gtgtgcaggt ccccttcgcc gcccqqaqac
                                                                     2760
atcatttcca aatggactcc actcatcagt tccttcgtgc cgggggcctc ggggggccg
                                                                     2820
tggctggtga cggacagcgg gccagggaat tctgacgctc ggcgtgaaaa cagcaagtta
                                                                     2880
atgtgtgaca tggacgtgga ctggtctctt ttggaactct ccagtcctgc agggagctgc
                                                                     2940
agttttctgt ggtgctgacg aggtttcaag cacttcctcc tgcaataata taaaaggaga
                                                                     3000
cccagcaaaa ccaaaagtat gaaagccatt cctcctaaaa tggccaaaag aaacaccgtg
                                                                     3060
tgatacgtgg taatgtcctg tgttacaacg ggacctggga tgggagggga catggcggcc
                                                                     3120
acccagtace ccaactgggg ggcaatgtat gtccacgtca gctggctgcc ttcctggtgc
                                                                     3180
acaagaccca gaccgctctt cagccacgtt cccagcttct ggtcaaaccg ccacgccgcg
                                                                     3240
acataggcat tgtgcctcag gctgctctgc gtggccaggg gcacagtgac atagatggga
                                                                     3300
ccatccacca gcaccggcgt tccattactg ctcagcaagt ggacgctgac ggctgtgact
                                                                     3360
ggggtcaggt catgcctggt gctgtttcct gttccatttc cgtctaatcc tcgcaaataa
                                                                     3420
ggaaaactgt ccacctccga aggggagctg gcggccgtga gaaacgcggt caggtcactg
                                                                     3480
tagctggtgt tctcaggcaa cctcagagcc cttctctgga aatgaacgcg aggctgtggc
                                                                     3540
cgggcacctt ggaatcctga tactatttgg acgacatctt catataccat tagagtggca
                                                                     3600
gagcgttctg gaagcaggcc aaggctcaga gaggaaaata caggtaaccg gattggcttc
                                                                     3660
catggggcag agtttggcac gtaggcatgc ttcgaggcgg tgacaatcaa ctgactgccc
                                                                     3720
agettataet ggaacttgat aaaggegaeg ceateagtee eegaggtgee agaggetatg
                                                                     3780
gaggcctggt tggtgaagat ctcgatgagc gcatctgcta cgggctggtg ggtgctggcg
                                                                    3840
tegetgatgt geacetttaa egteacetet tgggeteegg egeegggete eegeagegte
                                                                    3900
ttggtcaccg ccttccagac gtggcagccc agcaggcaca gcagcagcgt cgcggacctg
                                                                    3960
ctcgtctccc ccc
                                                                    3973
```

```
<210> 3477
<211> 1459
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1458)...(424)
<223> similar to gi3881654 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3477
ttttttttt ttttctaaag taataccttt attctggaga aaacaaacac ctccaaaaaa
                                                                      60
attctaaaag attttgagag gggaaaatat agacacacaa ctgcattcat tctgatcttc
                                                                      120
cacacaaaga tcaggtgaag aaatctatgc agctatacat gctaggacct gttgtacacc
                                                                     180
atccctgcaa ccccatagaa agaaaaaaa ctctttttc aaaatagaag cagtattctt
                                                                     240
ctacgaaaac aaaacaatca catgtgacta ctggaaatgt tagtgttaca cagagtcctt
                                                                     300
taaaaaataaa tcacagccaa agttccataa agtacagaag cttgaaacag aaaataaaaa
                                                                     360
tcgactcgaa gagtgatgat gggagcctga agctccatcc tcacaaggac ggcagcctct
                                                                     420
ggacatcact gcaaaggtca caggaggaca gcttcacttc agagttgtaa cttctcaccq
                                                                     480
cctgtctcct tggctcatag taatccacta tggacactga agcatcttgg gtatttgaaa
                                                                     540
ctttaaagtt tctcacagca ggaatattaa cacaaaactg ggtttcattt acagaatcta
                                                                     600
aatagaggtt gagttttcca tgatcatatt ccactttctt cactgtctcg ctcagagaaa
                                                                     660
ttgcttctga aggcaccata aagccactta ataggttaac ttccataaga qccatqccac
                                                                     720
tcctacccgg gcccgaaaag cttgtacaca cattcaaatc cacatgattg agatcatctt
                                                                     780
tattttcttt tacagcaaca tctaaatcaa aggcttcttg attttggata gatcttcgtc
                                                                     840
ttctagaaga cccagaagcc ttcacattat atacaacatt gagctgacaa atagcaaatc
                                                                     900
```

```
caaaaccatt tgcggaaata ttacactgcc attggctgta ccatcagcaa gctctgctgt
                                                                      960
ctgaaggagt aagcggttgt gtgtgtcaat cagaaacttt acaggacttg gtgagctagg
                                                                     1020
ccccgtcacg gtcacttgga tatttgtcct ttctgtattc attagggctg caaattcaga
                                                                     1080
cagageettt aaageeacag tggtateetg agtagatgea aaaceaceea agetatttet
                                                                     1140
ttgcctgctt agccacctca taattgggat tccctcagaa qtctgaaatt gtaagaagtg
                                                                     1200
tgagagcagt gcataggctg caacttcaat atccagggag cgtggctgcc aggagtcaga
                                                                     1260
aagtttggac tctgatgaca cccagaattg catgccacct tcttgttctg ctctccaagt
                                                                     1320
cagcatattc aaagcttcct tcgctttagg actccccact gatgacaatg cataagttat
                                                                     1380
aagggctaga gtataattgt ctgaaattcc tctactgaat tcagactcca aaaaatggat
                                                                     1440
agactcttgc acctcgtgc
                                                                     1459
```

```
<210> 3478
<211> 2304
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2305)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(1053)
<223> similar to gi4884158 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3478 gggcgtcgcg ccctggggcc ggggccgggc ggcaccgcgg tgcgcaagcg caaccgtcgg 60 tgggtcgggg atcggtcgcc tgagaggtat cacctcttct gggctcaaga tggacaacaa 120 gaagegeetg geetaegeea teatecagtt cetgeatgae eageteegge acgggggeet 180 ctcgtccgat gctcaggaga gcttggaagt cgccatccag tgcctggaga ctgcgtttgg 240 ggtgacggta gaagacagtg accttgcgct ccctcagact ctgccggaga tatttgaagc 300 ggctgccacg ggcaaggaga tgccgcagga cctgaggagc cccgcgcgaa ccccqccttc 360 cgaggaggac tcagcagagg cagagcgcct caaaaccgaa ggaaacgagc agatgaaagt 420 ggaaaacttt gaagctgccg tgcatttcta cggaaaagcc atcgagctca acccagccaa 480 eggeegteta tttetgeaac agageegeag ectacageaa acteggeaac tacgeaggeg 540 cggtgcagga ctgtgagcgg gccatctgca ttgacccggc ctacagcaag gcctacggca 600 ggatgggcct ggcgctctcc agcctcaaca agcacgtgga ggccgtggct tactacaaqa 660 aggetetgga getggaeeee gacaaegaga catacaagte caaceteaag atageggage 720 tgaagctgcg ggaggccccc agccccacgg gaggcqtqgg cagcttcgac atcqccqqcc 780 tgctgaacaa ccctggcttc atgagcatgg cttcgaacct aatgaacaat ccccagattc 840 agcageteat gteeggeatg atttegggtg geaacaaece ettgggaaet eeeggeaeca 900 gcccctcgca gaacgacctg gccagcctca tccaggcggg ccagcagttt gcccagcaga 960 tgcagcagca gaacccagag ttgatagagc agctcaggag ccagatccgg agtcggacgc 1020 ccagcgccag caacgacgac cagcaggagt gacgctgcct gctcccggtg tgaccgcgtc 1080 cttccctggc cgacccgaag gaagccttct ggttgtctgc cacttcctcc tgttggactg 1140 cctgagagag gggaagagag agacctcgga cctgcatgtc aagatggatt ttcccctttt 1200 atctctgccc tcctccactc cctttttgta actcccttac agcccccaga cccttcttga 1260 aacgagagcc agcaagctga gcacagacca gcagcgacct cccttccagc ccccagaaag 1320

```
ctcggtcact tgagtgtttt ctagaatcct ggggtgctcc cgggccgctc tcagagaagt
                                                                     1380
ggcaggtttc acgttcagcc gtgtggcgga tcgtgtggct tccaaagcct tttacagccc
                                                                     1440
ccgccccca tcccgtggtc tgtctgcagg aactctcccg tctgtgagaa gcctctttcc
                                                                     1500
gagtogacot cooggocaco coggocotgt gootgotogg aagagotoac tgocagotgo
                                                                     1560
ggcctgggca ccgcgggcca tgtgtgtttg catgaggaac tctttagtgg cagacaccta
                                                                     1620
agagacggct gcggtcaccc cacgcctccg cggctcagga gccgtcctgg gtgcatagga
                                                                    1680
ccagtttctg tgacttttct ccagttgggc atgttgacag acatgtttcc cctcctccca
                                                                    1740
ccctcatttt ctggtcctcg cgactgagag ccaggggcga catcatgacc ttctgtcccg
                                                                    1800
gccgccttag ccccgggcac agggaaggca gctgggccgt ttctgtctgt gtcccatcct
                                                                    1860
getgteette tgteetggat gttteatggg ceeggggeee eeceagggaa gettaeeeet
                                                                    1920
cctgtgctgg gtggaggccc acgggacacc tccaggtgcc acccaccttg qcccttaaaa
                                                                    1980
cagcccaccc aggaaagcaa gccgggagag cccggacagc aggcagcctt gtctgggttc
                                                                    2040
cttgaggcct gggggtggca gacgaagccc acggcgccgt ggtcccagca gcagggttgt
                                                                    2100
cagtcggagc atcctggggg ctccctggct cctggcccnt ctgtgaggta ggcgcaqtac
                                                                    2160
cgtgtatcgt aggtagcagt aggaacgggg gccgcccgcg gccctgcagc cgctcatggc
                                                                    2220
ggtgaggtgt gtgccaagcc cacceggggt gcagggcgtg acgtgtaaga gaacacctag
                                                                    2280
gcgttgtgac ctctgaaaaa aaaa
                                                                    2304
```

```
<210> 3479
     <211> 1838
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1170)...(656)
    <223> similar to gi453376 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3479
cggaggggga ctgagatgct gggatcaaag aagggggagg tggtccccat atatccttcc
                                                                    60
tttctgaaac ccagggggga ataaaggaag aggggatgag agatgtgtgc tgttttaaca
                                                                   120
gctcaccctg ctaaggggcc ctaaagtgcc aagtcaagct gccagcctcc agagattaga
                                                                   180
attctatggt atttgaagat aagtgtgccg cagggggtag gagccagaac catagggcag
                                                                   240
cagtagagga ggagaaggga tttagaagac agtaatatat gattaaaagt taaaagctga
                                                                   300
tccagagcac atcagagtta caggttggaa agggggatct gccgatgagc aggaagtctg
                                                                   360
ctgatggctg gaaccgagta tgagaataac cctcacttta agagctqctg ctqcttcttt
                                                                   420
tttgtctacc tttctggtaa agacaacatc aattttataa ggggagcaac agagggagaa
                                                                   480
540
caagcccttc agttatttca ctagatttta aatgctttag atttttttt tgtccttttt
                                                                   600
aacttttaaa tacaaagtct gagctgtccc atgccccaag tcttcctgtc cactaaggtc
                                                                   660
cggcagagtc tgaatcttca atcagaacct ctgtggtagc accgagtata tctgagttca
                                                                   720
taaccagece tteagtgeet ceaetgetge egetteecae aaagatette eeateageea
                                                                   780
tcaggctcac ccgttccgtc ccactgcagt atgactttga catcccttca gcttctaaca
                                                                   840
gtaggcactc tccagaggtt gagtttccca agggctcagg aagaagagga agaccctgac
                                                                   900
catctgaagg ctgcgtcagg gactctgggt tagtgcccaa qatatctgtg ctggtgatga
                                                                   960
gggcgcctgc attgggcagc cagagcttct gcaatcagca cctcagggtg gctttttgcc
                                                                  1020
ttgtgtgcca ctacgctgtc cttcttctca aattttttgc cacagatatt gcaagaaaac
                                                                  1080
```

1140

1200

tggtagaagg agtctgcatc atgtttcttc atgtgccaat taagagatgc cttttgtcga

caagtaaatc cacagatctc acatctaagg agaggagaaa aggaaatggc tgatccaaca

```
gagaaataaa gagtgctctt attcaggatc agggttagag tttagagcat atatatacat
                                                                    1260
acacacaca acacacaca acacacaa taatcagtaa catacttctt ttgaaggatt
                                                                    1320
gggaaatgtt actagatgga aaactaatct gatcttcttc tqtttqcctq aaaaacagag
                                                                    1380
ggaaactaag aaaaaggcta ctaactaatg cccccaatca atatccactc atttatttga
                                                                    1440
tgaaagtaaa cagcagtggc aactaatatg tttgtaaagc ggcaaacctt caagtagggc
                                                                    1500
atatatcctt ctcacccaga tgttcaccag taaataatac tcactgtaat ggcttctcgc
                                                                    1560
caqtqtqaat catccqqtqc actqccaqat tqtqqqqaact cttqaaqqcc cqaqcacaat
                                                                    1620
attcacagat ataatccctt tgatctatga agaaaatact gtggttagtg ttctatttag
                                                                    1680
ataccctgta aatattttcc cttacagtaa gtaagcagat gatggggcag gcaatttaga
                                                                    1740
gtaaaagcaa tgctgttttc aatgtataaa cactttgggt aaacaaaatt taaaaaagaa
                                                                    1800
aagtattgct ttaaaaaaaa tccaacattc ctcqtqcc
                                                                    1838
```

```
<210> 3480

<211> 3184

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (130)...(2367)

<223> similar to gi1336628 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 3480 gcttttatat ttgagcttgt ttttcaagtg ataggagagt tgatgcagtt ctaacgtaag 60 tgtaattaaa gtaggctttt tgaaaaaata gtctgtggaa ttcttattac tgtttttccc 120 ccctactttc agcttcattt acctcttaat tctcctttgc ctggaagtga attgaccaag 180 gaaccttttc gttgggatca gagactcttt gcattagtgt tgcggttgcc tggcaccatg 240 tcagtagaat cagaacagtt gacaggtgtg cctttagatg actctgcaat cacaccaatg 300 tgtgaagtga caggcggccg ttcatattct gtgtgttctc caaqaatgct taatcagtgt 360 ctggagtcct tggtgcagaa agtacaaagt ggggtggtaa taaactttga aaaagcagga 420 ccagatcctt cccctgtaga agatgggcag ccagatatat caaggccttt tggatctcag 480 ccttggcata gctgtcacaa actcatatat gtcagaccaa atcctaaaac tggggttcct 540 ataggtcatt ggcctgttcc agagtctttt tggccagatc aaaattcgcc aacactacca 600 cctcgtacat ctcatcctgt agtgaagttt tcctgtacag actgtgaacc aatggttatt 660 gataaacttc cttttgacaa atatgagttg gaaccttcac cactgactca atttatcctg 720 gaaaggaaat ctcctcaaac atgttggcag gtgtacgtga gcaatagtgc aaaatacagt 780 gaacttggtc atccttttgg ttacttgaaa gccagtacag cactgaactg tgtcaactta 840 tttgtgatgc cttacaatta tccagtcctt cttcccctct tagatgactt gtttaaagtg 900 cataaagcaa aaccaacatt gaagtggaga cagtcatttg aaagttattt gaagacaatg 960 1020 atagcagaca gtatggaata tggacttagt tacagtgtca tttcatacct caaaaaacgt 1080 gagtcaacag gccaaaatag aatctgatcg agtcattgga tctgtaggca aaaaagtagt 1140 acaggagact ggaataaaag teeggageeg ateacatggt ttateaatgg catataggaa 1200 agattttcaa caactcctcc agggaatttc agaggatgtc cctcacagac tqctagacct 1260 taatatgaag gaatacactg ggttccaagt tgctttgctg aataaggatt tgaagccaca 1320 gacatttaga aatgettatg acataceaag aegaaatett ttggateaet taacaagaat 1380 gagatctaat cttttgaaga gcactcgcag atttctgaaa ggacaggacg aagatcaagt 1440 gcacagtgtt cctatagcac aaatggggaa ctaccaggaa tacctcaagc aagtaccttc 1500 tccactaaga gaacttgatc ctgatcagcc acgaaggttg catacatttg gcaaccctt 1560

```
taagctggat aagaagggta tgatgataga tgaagcagat gaatttgtgg ctggacctca
                                                                     1620
aaataaacat aaacgacccg gagaaccaaa tatgcaaggg atccctaaaa gacgtcggtg
                                                                     1680
tatgtctcca ctactaagag gcagacagca gaatcctgtt gtaaacaatc atattggggg
                                                                     1740
aaaaggacca cctgcaccta caactcaagc acagccagat cttattaaac ctcttcctct
                                                                     1800
tcataaaatt tcagaaacca ctaatgattc gataatacat gatgtggttg aaaatcatgt
                                                                     1860
tgcagaccaa ctttcatcag acattacacc aaatgctatg gatacggaat tttcagcatc
                                                                     1920
ttctccagcc agtttactgg aacggccaac caatcatatg gaggctcttg gtcatgacca
                                                                     1980
tttaggaacc aatgacctca ctgttggtgg atttttagaa aatcatgagg agccaagaga
                                                                     2040
taaagaacaa tgtgctgaag agaacatacc agcatcttca ctcaacaaag gaaagaaatt
                                                                     2100
gatgcattgc agaagccatg aagaggtcaa tactgaacta aaagcacaaa taatgaaaga
                                                                     2160
gatccgaaag ccaggaagaa aatatgaaag aatcttcact ttactgaagc atgtgcaagg
                                                                     2220
cagtttacaa acaagactaa tatttttaca aaatgtcatt aaagaagcat caaggtttaa
                                                                     2280
aaaacgaatg ctaatagaac aactggagaa cttcttggat gaaattcatc gaagagccaa
                                                                     2340
tcagatcaac catattaata gcaattaaaa gaaaatagaa tgtggccact tatttcacta
                                                                     2400
tcttcttcaa atacaaagta aatacaagac tgttgtgatc ttgcattcat tttctgacat
                                                                     2460
gcattgttgg ctatttgaaa tactaaaagc aaatctacag atcctttttc catcatttta
                                                                     2520
cagtgacctt ttcttcattt tggtttattt ttgtaatgtg aaaagtatca ctctaaaaaa
                                                                     2580
catttttaat ttaacaaact aaaaatattc ctccaaatct cttgcttgtc attgactctt
                                                                     2640
gcgtgtcaat ttccctcagg ttctattttc ttaaaccaac ctttaaaatt gtcacctctg
                                                                     2700
ttaaggttga actttgccaa aaaaaaaaga agttactttg taatttttgg ggaaaaaagc
                                                                     2760
acatacatta aaactaggta atgttttgta tatacagtta ttttggatat attattgtaa
                                                                    2820
gttgtacaaa tgtattttcg aagaatattt aagtrcaagg cacttttgtt attccatcaa
                                                                     2880
taaatgctct attttactct tgtgtggttt aggaaataat cacatttaaa gctaatcatt
                                                                    2940
taaaaacatc ctaagataat ggaattttaa aggccttgct ttttagcatt ggaaaaatac
                                                                     3000
accacttgaa gttcatgttt gttaagccta actgtaatta catgttacat aatctgcatt
                                                                     3060
geetttttae tatatgtteg tagtttttgt tggeeatgee aacataetee catttetgee
                                                                     3120
tagattatgg gaatgacttt gtatggggca gatagacaga tactttaaaa gctatttaaa
                                                                     3180
                                                                     3184
```

```
<210> 3481
<211> 2513
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(951)
<223> similar to gi437664 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

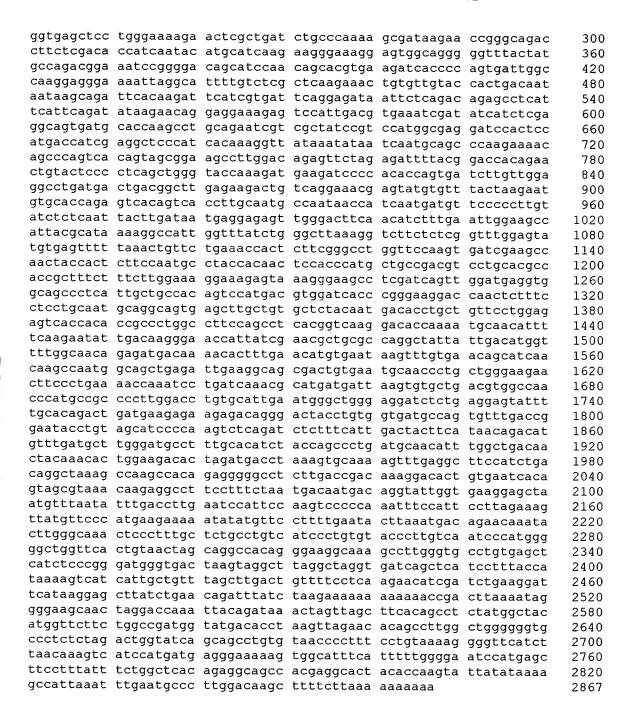
```
<400> 3481
ggtaagccaa ctgaaatcta ctcaagacac cttaaaccaa atggaaaagt ttggaaaagt
                                                                       60
acaagatgca agtgagaaat agcaaagctt ctttttgaca agttaaagat ggatgtttgt
                                                                      120
cagaaagtgg atttacttgg agctagtcgc tgcaatatgc tatctcattc gctcactacc
                                                                      180
taccagagaa cactgcttgg attctggaag aaaacagctc gaatgatgtc ccaaattcat
                                                                      240
gaagcctgta ttggctttca tccgtatgat tttgtagctc tcaagcaact acaagacacg
                                                                      300
ccaagcaaga ttagtgaaga caataaagat gaacaaatag gcggttttct tactgaacag
                                                                      360
ctcaataagc tagttttgtc tgatgaggaa gcaagctttg agagtgaaca agcaaacaaa
                                                                      420
gatcacaatg aaaaacattc tcaaatgaga gaatttggag cacctcagtt ttctaactct
                                                                      480
gaaaatgttg caaaagatct acctgtagat tcattggaag gagaagattt tgagaaggaa
                                                                      540
```

```
ttctcatttc tgaacaacct cctaagttct ggttcttcaa gtactagtga atttacccaa
                                                                      600
gaatgccaga ctgcctttgg gagccccagt gccagtctca catcccagga gccttccatg
                                                                      660
gggtctgagc ccctcgctca ttcttctcga ttccttcctt cacaactctt tgaccttggc
                                                                      720
tttcatgtgg ctggagcgtt caacaactgg gtctcccaag aggaatcaga actttgtctt
                                                                      780
tcacacactg ataaccagcc agtgccttca cagagtccaa agaaattaac aagatccccc
                                                                      840
aacaatggca accaagacat gtcagcctgg ttcaatctgg ttgcagactt ggatccactt
                                                                      900
tcaaacccag atgctattgg acactcagat gatgaacttc ttaatgcttg actgaagtta
                                                                      960
taatgtcact tcagtggcct tgagacatca attttgcaac gtatttcctt cgtggaaagg
                                                                     1020
atttagattg taacccgcac acaaaagcac ggtgtttgtg aatataacac ctgtcagcca
                                                                     1080
actttagaca gatggtaaag accacatttg aataagtaca catctttcat atcttggatt
                                                                     1140
tgcagctgtt ggtactatgt ggaaaatatt agaaacttct atgtggaaaa tattagaaac
                                                                     1200
tacagagttt gcgatattta gatactgaaa tttatgtcaa aataacggct aggaataatt
                                                                     1260
ctgtcaatat ggagttgagc ttatttcttt ggaaaccctt ttaagttgcc ttgctggctg
                                                                     1320
tgagaatttt atatgtggat aacaaagata gatagatagc atgtaaattg ggttgtggtt
                                                                     1380
tggggtcagt ttttaaatga aatagtagcg aggaggattt tctgttttgg aaaacaccat
                                                                     1440
tagaaccaga ccagctttgt tttgggttag agagagtaag atttgagaac tcagtttgct
                                                                     1500
ttaatgaaat cacagagaaa cttggtactt gtttttcttc atttggaggc taaaatgtaa
                                                                     1560
tgttttttca ttcatacaaa ataatggaca ctccctaatt ccattattaa atcttgaagg
                                                                     1620
ggaagtagca ggataattaa tttgctaagc ccatcctctg cagaaacaga aaaatctatc
                                                                     1680
ttcccatctc ctaaaactca gaatgcacag taatacttaa ggcttgtaca agtgtcttca
                                                                     1740
gacccacttt ttcatacact tgctatatag tagtatgcag tatttatatt attcctgaaa
                                                                     1800
ataaaatgag gggagaatat teeetaagea aetggeaata gtatteetga aataeetaga
                                                                     1860
aatttctatc tgaatgaggg agacacttat gaacacctta tccttacata tatttqcata
                                                                     1920
cttatctcat attttgtgac ataattattt aacccagaat actttctggc agacatacag
                                                                     1980
aaagctctgt gtgatcaata agggagtgtc tcatttttct acttccctct ttctgtgggt
                                                                     2040
gacatgatet gaggttetat ttgattaeta ageaaaatet gttaeceeta caqqqtttaq
                                                                     2100
aacctaagta ttagagagga aggctattta atggaagtta gtgtaagctg ataaaaacgt
                                                                     2160
agctaccgta cacacatc aatcactcaa tttcctgtcc ttttaaattg cccacccttt
                                                                     2220
aattttgaag caatttccca agtgtgtgtt tgttttatat ttgtcatcca qtccattgca
                                                                     2280
tttccataag aagacatttt gactggctgg gtgcggtggc tcacgcttgt aatcccagca
                                                                     2340
ctttgggagg ctgaggcagg cggatcacga ggtcaggaga tggagaccat cctggctaac
                                                                     2400
atggtgaaac cccgtctcta ctaaaaatac aaaaaattag ccaggcgtgg tggcacgtgc
                                                                     2460
ctgtagtccc agctactccg gaggctgagg caagagaatg gcgtgagccc qqq
                                                                     2513
```

```
<210> 3482
<211> 2867
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1984)
<223> similar to gi3818572 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3482
cttcctcttc tccacgcagg cttcaacagg agatttatgg agaatagcag cataattgct fgctataatg aactgattca aatagaacat ggggaagttc gctcccagtt caaattacgg gcctgtaatt cagtgtttac agcattagat cactgtcatg aagccataga aataacaagc gatgaccacg tgattcagta tgtcaaccca gccttcgaaa ggatgatggg ctaccacaaa 240
```



```
<210> 3483
<211> 1091
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (15)...(798)
```



<223> similar to gi6002700 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3483
tttcgtagag cagcacccag cagcgccccg gggtccccgc gggaccgcgg ccactggacg
                                                                       60
gatacetegg agtggeggac cacaageeee tgaaaatgca etgeagggae tgtgeeetgg
                                                                      120
tgaccagete agggeatetg etgeacagte ggeaaggete ecagattgae cagacagagt
                                                                      180
gtgtcatccg catgaatgac gccccacac gcggctatgg gcgtgacgtg qqcaatcqca
                                                                      240
ccagcctgag ggtcatcgcg cattccagca tccagaggat cctccgcaac cgccatgacc
                                                                      300
tgctcaacgt gagccagggc accgtgttca tcttctgggg ccccagcagc tacatgcqgc
                                                                      360
gggacggcaa gggccaggtc tacaacaacc tgcatctcct gagccaggtg ctgccccggc
                                                                      420
tgaaggcctt catgattact cgccacaaga tgctgcagtt tgatgagctc ttcaagcagg
                                                                      480
agactgggca aagacaggaa gatatccaac acttggctca gcactggctg gtttacaatg
                                                                      540
acaattgcac tggagctctg tgacaggatc aatgtttatg gcatggggcc cccagacttc
                                                                      600
tgcagggatc ccaatcaccc ttcagtacct tatcattatt atgaaccttt tggacctgat
                                                                      660
gaatgtacaa tgtacctctc ccatgagcga ggacgcaagg gcagtcatca ccgctttatc
                                                                      720
acagagaaac gagtetttaa gaactgggea eggacattea atatteaett tttteaacea
                                                                      780
gactggaaac cagaatcact tgctataaat catcctgaga ataaacctgt gttctaagga
                                                                      840
atgagcatgc cagactgtaa tcccaggtat tcactgcatc agacaccgag acactgaact
                                                                      900
tcctgagcca ccagacagga aagggtagca gaaaacagct tcactcctca ggaagtacca
                                                                      960
tggacagacg cctaccaggg gtgacaaagc agtgcagttg gattgtaagg aaaaattccg
                                                                     1020
gaattaatgc atcctaatga atgttgtccc cttcaatggt gttaccttaa gagctgaaca
                                                                     1080
ttcaattcag g
                                                                     1091
     <210> 3484
     <211> 1129
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(738)
     <223> similar to gi994773 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3484
tcaagttcag gagacaggaa gcgaacggcg cgagaggaac aggatgcacg gcctcaacga
                                                                       60
cgctctggac aacttaagaa aagtggtccc ctgttattct aaaacccaga aactgtccaa
                                                                      120
aatagagact ttacgactgg ccaaaaacta catctgggca ctttctgaaa ttctgagaat
                                                                      180
cggcaagaga ccagatctgc tcacattcgt ccaaaactta tgcaaaggtc tttcccagcc
                                                                      240
aactacaaac ttggtggcag gctgcttgca gctcaacgcc aggagtttcc tgatgggtca
                                                                      300
gggtggggag gctgcacacc acacaaggtc accctactct accttctacc caccctacca
                                                                      360
cagocotgag otoaccacto coccagggoa tgggactott gataattoca agtocatgaa
                                                                      420
accctacaat tattgcagtg cgtatgaatc cttctatgaa agtacttccc ctgagtgtgc
                                                                      480
cagccctcag tttgaaggtc ccttaagtcc tcccccaatt aactataatg ggatattttc
                                                                      540
cctgaagcaa gaagaaacct tggactatgg taaaaattac aattacggca tgcattactg
                                                                      600
```

660

tgcagtgcca cccaggggtc cccttgggca gggtgccatg ttcaggttgc ccaccgacag

<210> 3485 <211> 884 <212> DNA

<210> 3486 <211> 6527 <212> DNA

<220>

<213> Homo sapiens

<221> misc_feature <222> (1)...(3049)

<220>

<213> Homo sapiens

<221> misc_feature <222> (14)...(507)

```
ccacttccct tacgacttac atctgcgcag ccaatctctc acaatgcaag atgaattaaa
                                                                      720
tgcagttttt cataattaat gaggaaaatg aaaataaaca gtggtcattc acctccctg
                                                                      780
tctaattaag acaaagcaga tgcttgtggg ctgagtaatt ggcacaactc tatctaaggt
                                                                      840
gtttactagt ttctgaagtg tgtttcaact attgtgagaa ttttctatgt aataataaat
                                                                      900
ctcttttcgt atgagaactt cttttccttt ccttttgtct gtgaagcact gtgattctgt
                                                                      960
ttctactgga aagattttt tctttttaat tttcttttaa acttatttaa tttgtttgaa
                                                                     1020
caaggtgtct aagaatatac tgttgaataa agacatgcac acagcataat tcaatgtcta
                                                                     1080
ttttggttgt acagtaatta taaaatgcat gttattaaaa ccagatgag
                                                                     1129
```

```
<400> 3485
ataaccaaag ggcgtgcggt cgctggcagc gctggccctt gtcctggcgc tggccccggg
                                                                       60
gettgeecae agecegggee aggegagaea eegegeeetg eegagegggg geeceeagtg
                                                                      120
eggettttea eegaggagga getggeeege tatggegggg aggaggaaga teageeeate
                                                                      180
tacttggcag tgaagggagt ggtgtttgat gtcacctccg gaaaggagtt ttatggacga
                                                                      240
ggagccccct acaatgcctt gacggggaag gactccacta gaggggtagc caaqatgtcc
                                                                      300
ttggatcctg cagacctcac ccatgacact acgggtctca cggccaagga actggaggcc
                                                                      360
ctggatgagg tcttcaccaa agtgtacaaa gccaaatacc ccatcgtcgg ctacactgcc
                                                                      420
cggagaattc tcaatgagga tggcagccct aacctggact tcaagcctga agaccagccc
                                                                      480
cattttgaca tcaaggatga gttctgatgt tccccctgca ggagcaggtt cttgggagcg
                                                                      540
tgaggcagga agacactagg tgctgaatct cctgcaaaac tggctgcctg gaggccctga
                                                                      600
gccacccaga tctgaataaa acagatgctt accctggaag agcaaatgcc tcctgttgtc
                                                                      660
cttggtcagg ggttctgtct acctggggac ccctgtctgc acaccaggga tcaataagag
                                                                      720
ccaaagtggg acacctccta gatgtcagta tcagctggct gggcagtgga attttgagcg
                                                                      780
acgetttact ttataetttt etgtgettga eagattttea gecatgaeca tgtteaettt
                                                                      840
ataatcaaaa caaaaataaa ggtcccattt ttacaaaaaa aaaa
                                                                      884
```

<223> similar to gi5771535 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<223> similar to gi5410204 in the genepept database release 114,

<400> 3486 atgccccggg cgactgcact tggggccctg gtgtcactgc tgctgctgct gccgctgcct 60 cgcggcgccg ggggactcgg ggagcgcccg gacgccaccg cagactactc agagctggac 120 ggcgaggagg gcacggagca gcagctggag cattaccacg acccttgcaa aqccqctqtc 180 ttttggggag acattgcctt agatgaagat gacttgaagc tgtttcacat tgacaaagcc 240 agagactgga ccaagcagac agtgggggca acaggacaca gcacaggtgg gcttgaagag 300 caggcatctg agagcagccc agacaccaca gccatggaca ctggcaccaa ggaagctgga 360 aaggatggcc gggagaatac cacactcctg cacagccctg ggaccttgca tgccgcagcc 420 aagacettet eteecegggt eegaagagee acaaceteaa ggacagagag gatatggeet 480 ggaggagtca tcccctacgt cattggaggg aacttcactg ggagccagag ggccattttt 540 aagcaggcca tgagacactg ggagaagcac acctgtgtga ccttcataga aaggacggat 600 gaggaaagct ttattgtatt cagttacaga acctgtggct gttgctccta tgttgggcgc 660 cgaggaggag gcccacaggc catatccatt gggaagaact gtgacaagtt tqqcattqtq 720 gctcacgagc tgggccatgt ggttgggttt tggcatgaac acacccggcc agacagagac 780 caacatgtca ccatcatcag ggaaaacatc cagccaggtc aggagtataa tttcttaaaa 840 atggaagctg gggaagtgag ctctctggga gagacatacg actttgacag catcatgcac 900 tacgcccgga acaccttctc aagaggagtt ttcttagaca ccatccttcc ccgtcaagat 960 gacaatggcg tcaggccaac cattggccag cgcgtgcggc tcagtcaggg agacatagct 1020 caagcccgga agctgtacaa atgcccagcg tgtggggaga ccctgcagga cacaacggga 1080 aacttttctg cacctggttt cccaaatggg tacccatctt actcccactg cgtctggagg 1140 atctcggtca ccccagggga aaagatcgta ttaaacttca catccatqqa tttqtttaaa 1200 agccgactgt gctggtatga ttacgtggag gtccgggatg gttactggag aaaagccccc 1260 cttttgggca ggttttgtgg cgataagatc ccggagcccc tcggtctcca cggacagccg 1320 gctctgggtg gagttccgca gcagcagcaa catcttgggc aagggcttct ttgcagcgta 1380 cgaagctacc tgcgggggag acatgaacaa agatgccggt cagattcaat ctcccaacta 1440 teeggatgae taeagaeett eeaaggaatg tgtetggagg attaeggttt eagaggggtt 1500 tcacgtggga cttaccttcc aagcttttga gattgaaagg cacgacagct gtgcatatga 1560 ctacctggaa gtccgggatg gccccacgga agagagtgcc ctgatcggcc acttttgtgg 1620 ctatgagaag ccggaggatg tgaaatcgag ctccaacaga ctgtggatga agtttgtgtc 1680 cgatggctct atcaataaag cgggctttgc agccaatttt ttcaaggagg tggatgagtg 1740 ttcctggcca gatcacggcg ggtgcgagca tcgctgtgtg aacacgctgg gcagctacaa 1800 gtgtgcctgt gaccctggct acgagctggc cgccgataag aagatgtgtg aagtggcctg 1860 tggcggtttc attaccaagc tgaatggaac catcaccagc cctqqqtqqc cqaaqqaqta 1920 tcccacaaac aaaaactgtg tctggcaggt ggtggccccc gctcagtacc ggatctccct 1980 tcagtttgaa gtgtttgaac tggaaggcaa tgacgtctgt aagtacgact ttgtagaggt 2040 gcgcagcggc ctgtcccccg acgccaagct gcacggcagg ttctgcggct ctgagacgcc 2100 ggaggtcatc acctcgcaga gcaacaacat gcgcgtggag ttcaagtccg acaacaccgt 2160 ctccaagcgc ggcttcaggg cccacttctt ctcagataag gacgagtgtg ccaaggacaa 2220 cggcgggtgt cagcatgagt gcgtcaacac cttcgggagc tacctgtgca ggtgcagaaa 2280 cggctactgg ctccacgaga atgggcatga ctgcaaagag gctggctgtg cacacaagat 2340 cagcagtgtg gaggggaccc tggcgagccc caactggcct gacaaatacc ccagccggag 2400 ggagtgtacc tggaacatct cttcgactgc aggccacaga gtgaaactca cctttaatga 2460 gtttgagatc gagcagcacc aggaatgtgc ctatgaccac ctggaaatgt atgacgggcc 2520 ggacageetg geteceatte tgggeegttt etgeggeage aagaaaceag acceeacqqt 2580 ggcttccggc agcagtatgt ttctcaggtt ttattcggat gcctcagtgc agaggaaagg 2640 cttccaggca gtgcacagca cagagtgcgg gggcaggctg aaggctgaag tgcaqaccaa 2700 agagetetat teccaegece agtttgggga caacaaetae eegagegagg eeegetgtga 2760 ctgggtgatc gtggcagagg acggctacgg cgtggagctg acattccgga cctttgaggt 2820 tgaggaggag gccgactgcg gctacgacta catggaagcc tacgacggct acgacagctc 2880 agcgcccagg ctcggccgct tctgtggctc tgggccatta gaagaaatct actctgcagg 2940 tgattccctg atgattcgat tccgcacaga tgacaccatc aacaaaaaag qctttcatqc 3000 ccgatacacc agcaccaagt tccaggatgc cctgcacatg aagaaatagt gctgatgttc 3060

3120 ttgaaaatct gccctaaaac agtgtacagt atttttctca aacaaaaact cagaatccag 3180 ccttagaggt atatatttga atgaaagtct tgtaagtttg gccaacaagg tggagagaaa 3240 aatgttcttt tgcttctgtc tgcaatgtta tcattcatga actgttaaag tgttaaagat 3300 taggattgaa gtcactgacc attccggcta tgcttcttca taccattctc cttgtccctt 3360 gctcctatgt ggcaaaaggt cagccttggg gttggccgtt cctctaatct ggacttgctt 3420 gcaaaggtgc caggctgtct tctgtccatg ttgggcataa gggatgaaaa cttggccgag 3480 actaatgtgt ggcccacagc tttggctgga atcattttct ttctctctgc cagggacatg 3540 tcaaccaaga aacctgaaaa tatggatgga tgtcaggact aaaaaaaggc atcacagtga 3600 gcagtgagca cagagggagt ttcgagtata agaatcattg tcatgaagtt aggagaccac 3660 aaagccattt ctcagagtca ttcactctcc ttgtcccttt ggtttccccc cctccctaat 3720 tgcagtgggg gctaaggcat ccattatgaa tacagcagaa catttgctqq cqaqaqtcct 3780 gtctgctgag aagacaatat tgtggctcgt cctgatattt tttcattcat tgactttgag 3840 aagactccac ctgtgcttgg aattccatgg gcttcaaaga acatttcttc ttttagcttt 3900 ggaggcactt gccgtggcac acctggactc cttgacatcc aattcaaact gcatttgcaa 3960 aatgtgcaaa gacctcttat gagggaccaa ttcaggtccc ttatggggtg aacactgttg 4020 aagactggtt aattataagt tatgtaagaa tcatcgcctt gtggaacaag tcaatcagtg 4080 actagcttcc tgtagccaat caggttaaag agtgcgttgg taactttgct ctgattaact 4140 agtattcaat caccaacttg caaacagaat tcataacact tggcacttgt tctagagaag 4200 tgtagaggat gatgtttaca taattttagc acctcaaggt ataatttaaa cagtgaggta 4260 gttttgaatg gcatttcatt aaggcatcta tgggcattat gagctaaaag ctgtggtatg 4320 ttagctttaa aagagtattt atgttggaat aatttttaaa taatgtttac ataactgtaa 4380 gtcctgtttg gttgttgttg gacgcagggc ggcacatgag tgtttttggt tagagccaag 4440 atageteeca tgeaceggaa tteetttggg atgaateage ateattttaa acaaagtata 4500 tgtaaaaggt gaaaggttat atttttaca gatcagaatg tggcaccaga ggactgtgtc 4560 tcattaaagt gattgctggg agcaaaaact agaatgatac aaagaaaggt cagagaaatg 4620 catgggaata tttttcctt aaaacagaaa aaaattaaag tattattaat aatatatgtc 4680 tgtatatatg tatgtatgta aaagatcagc tgtcaaagcc ttaatcaatg cagtgtggaa 4740 aatgccaacc cetggteete getttaetgt gggeeetgea ggaetggete tecattteet 4800 gcctctcctt tcaccaagct ctgttttggc ctttctcggc cctggactga ggctcagcct 4860 acacgeteat attgtgeata tggeagaeee tgeeeagegt gegetttgat acageaaatg 4920 gagcagctga cctcatggct ccaatcccac ctgcctgtta gggtagattc catttatctg 4980 atttttgtat tttctgaggt tttatttggt ctcatcttgt ctatgagagt tgaaactgga 5040 actgggaaac ctaagatggg tgttatggtt ctttctccaa ggaaataaaa attctgcagt 5100 tttaaccttt agaagtctaa gcaagattaa caaatttcat agaaaagtgg gagggagtca 5160 gaaacagagt tggtgctgct cagcaggacg gtgaaacaat gatacttctt tttatctctt 5220 tagtatgaac attttcaaaa acacacagct tcaacaattg tcaccatatg gccaatttgc 5280 aacaatggga ctcttatgaa aaacctttat ttaggccttc tgtgtgacgt atccacagaa 5340 aagagaaget etgatteage tggggetage tgggeegete etetggaage eeacaettqt 5400 ggggacttag gcatgacaca ggttcttgca aagaaactag aggctggctt cactagagag 5460 agtccattca gcagaaagtc ccaggcctct gccttggtgc ttccaattat cagtgacctg 5520 cctgcaagca tccccagaag caaacagcag aggtagaaga tatcactgca qcctqctttq 5580 tgctttaatt gggtaccaag ctttggggat gacagtgagt tgcaagaata gttttagttc 5640 agagaattgt cttaggacaa caggctaatg aaggatttgg ggtctgggtt tttagcctgg 5700 ctccgttctg gtgtaacccg gtctagcaaa agctaagcct ggattgcagg gcaggaaaaa 5760 atctggaatt aactttagcc agtggaattt cttcaaacag agaaagagag qctqttcatt 5820 gatccactat tccctctatt ttcctctaag gtaaatattt agaggtattt acctgtaagg 5880 tgaagtttcc tttttatttc tactttacaa tttctctcta aagcaagctt gtccaaccct 5940 tggcccagga cggctttgaa tatggcccga cacaaattcg taaacttttt aaaaaacatt 6000 gtaagattet ttetgtgatt ttttttttte tegteageta tegttagtgt attttatgtg 6060 tggcccaaga taattcttct tccaatgtgg cccagggaag ccaaaagatg ggacacccct 6120 gctgtaaagt ttcatatcac tcatgaattg ctcagctgat ttaaataatt tgtaaaagcc 6180 tgctaactag caaattcaca ttgagatttt ctattgattg ggtccctttg atagctttca 6240 gattggtatt gttagcgttc catttgtgaa caaatgttcc cttggcttta gcagatgttt 6300 ttaaagtttc ttttgtagac cgaacttctg aagagtaata ccaaatgcct aaaattttat 6360 ttttaaaaag gaaaattgtt taaagtatta tatgtaaaca tatgggtatt ttttattttg 6420 tgtaatttta catttcatga aatgatgtca gtttcaaaga gaaagtggag aggacctaac 6480

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<210> 3487
<211> 4380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4383)...(1310)
<223> similar to gi3882293 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3487 ttttttttt ttacttgaaa aaattcacat ttatttactg tcaaaccgtg ttaaacttta 60 cactggatat tagtgatggg ctcattatta acaggtttac acaaagggat gaaaaaaaag 120 cagaattttg ctgaaacaat ttacatttca ttagaacttt atcataaaat aaattaatta 180 ctaaatatag gcagaaggaa tatggaagag taatatttat gttttatttt atttttaa 240 aaaagaatag gcaccttttg ttcactagaa agtttgtgag aagtgcccag tgccctcttt 300 gccctctgtt caagaataaa caggggtgac acacaatctt ttctagattt catcactttt 360 gtgcaaggca tgacataact ggcttcaaag agtttgtttc tccccataaa acacgttctt 420 ttggcaataa gaaatttaaa tgtaagtaat aaagactaac tttgtcaaag cagaacactg 480 tatacagtgg aaaagaagtg aaaatgagta gaacttacca tgacaaagtg taagaaaaaa 540 catttcataa catgtgcaac caagagcttt tcacaatatt ttcttcactc tttaaaatta 600 ttttaatgac aattatattt cagttggaca caaatgtatt tattttaccc taqcaataqa 660 acaaaatata atttctttag ccatttttca tgagaatagt tcattgtaca gttgaggaaa 720 catatgaaat aaggeetgtg gettgattge tagtggttaa geatgtttte aatetttgee 780 ttaatgtaaa agatttgcag tgaactgcaa actgatgcag gaatatctct cctqcttttc 840 caagtettgt caggaatagg taagggtaca ggtaaatttg teccaeaggg attttaaage 900 ctacgtcttg gtatataata caatggcagg gccctacaaa aatggtgcag ccatatttac 960 1020 cacaatttcc tcctaaacag cagcagaatc cttaaaatac cctggctggc atctcttttc 1080 tttgtaacaa ataattcact ttagtatact ctgtgtatat acaaagtttt tgtatgtttt 1140 ataaaaattc acagaactgc aaggttcagt catcttttt acaccagaga accacaggtc 1200 aagagtcatc tcttcaagca gagtttgagg gagctgcgtc aggcccaatg gtgtctttat 1260 ttattaaata ctcgcatgtg gccccttgga attccttagc tgtatgatta aagacttgta 1320 accagetgea titgteette tetaacatet cettetggaa tacaccette titgttaatg 1380 gggattatat aaccatcact attgcccctg ctgatctggt agcacatctg aagctgatgg 1440 ccagctccaa gatttggcat gcttttatag taaatgtcct cattctcact cctcctggag 1500 ggagagaggt cttcttccca tgtcagggct gctctccgga tagggagagt ctcctaagat 1560 tgggcatgct tgtataaaga gagtctctgt tgggqqactg taggtqatct tcaqcctctq 1620 ctgtcagttg ggagacatag ctgtcagttc cctcggactt cactttcttc tggggttggt 1680 acagaaggga gtgagtccgc tgaggaataa gtggtgcctc gagttccttt gtgatggagc 1740 tcccagcccc tgggttgtcg ctgtgcatta aagatgaagc atctgccaca atagcatcat 1800 cttcactgct gctacctcca atcacaggtt tgactggtag cgtgagctcg aggttgtgag 1860 tcttgctgct gccccgtaag ttgttgtgca ctaattctga aatgatcatt ttctcaaaag 1920 cagtatcatt cagacttagt ccacagtcca caacttgcac gctgtcatta tagtcaccct 1980 tgtgcagcga gtagctgttg ttaaaattac catttagcgg tagagtatcc atggcacttg 2040 tatccctggc attgttcagt gaatgtcctg gtgagttaaa tacaggagct gaaggggcat 2100 tacatacaac tgtttcagcg agcaatgtgt tataggggtt gttagtgccg tggggtcgaa 2160

```
gaagagggtt tgttagtagg taattgccag tcattccttg attaagtgtt gaagtgctat
                                                                     2220
tgatgtcacc tgagataaaa gaagattctg attgttttct cacagtatca ttccacattc
                                                                     2280
ttcttatacg actctgtgtg ccagaggaat agcgagcact ggttctggtg gttgatgcct
                                                                     2340
tcactgaact gtggggactc tcagttggga ggcctccaca gcagtatgag tgtctgaagc
                                                                     2400
acttgccata ttcttttcgt actttctttt ggagagcaca gtgaaagatg aaaatgaaca
                                                                     2460
ctccctggaa agcattaaat atagtgaaga gatatgccat cacaatagtc tcctcattaa
                                                                     2520
taaaaagcaa cccaaaggac caggtgaggc caagaagaca cagaagagcg aaagcgccaa
                                                                     2580
gcacccaaga cttaatgttt tccaacctgc tagaatctgg tttcaaagtg tttgaatgct
                                                                     2640
tcaccatttt gcacaatgtg atcaccaaga agataatatt tagcagaata atgaaggtaa
                                                                     2700
caggtccaat gaagctccat ataaagtagt tatcaacatg aagccagcaa gctttttctg
                                                                     2760
ttccatagct cttatagtca atagcagctg aaactccaac cactgtggca ggaaacaagt
                                                                     2820
aaccagcaac atagtaatat tttttccttg aatattcact ttcaaaaaact tcaactaaca
                                                                     2880
ttaggtagag ctgcacacct tctaggcaca tccaagcaaa agctgccaaa aagaaaaagt
                                                                     2940
gtagaagtcc tgcaaatatt gggcatgcaa tcgcatattt tgtcttatca atgcctatta
                                                                     3000
ggaaaataaa ttcagcaatg aaaaggttga tacaaaggtt cttgtgaata gtatttcggt
                                                                     3060
cactctgtag gccacggaaa aagcagaagg tgaagatgca gatagccagg caaacaaggg
                                                                     3120
aaatgacaat tcccacccag gtgatgactg taagaagtaa ttcatgaacg ccatctttat
                                                                     3180
atgcaatttc cctgtgggcc atgagaattg caaaattggt taggtggctg catgcacacg
                                                                     3240
ttgttcgagt tttattagtg tcaaccagct tgcagccctg ggtagaccaa tatcccatca
                                                                     3300
tagttctctc tgagtagttc cagaaggagc agtttgcatt gaaataattg tcaggatcaa
                                                                     3360
tgtgtggcag ggtaaaaagc acaggatcag tcaggtatac tcqqctqqac tctttattqa
                                                                     3420
ttgaaactga aatgacgtga gagttcactg caatggtgct attacgacca ataaaatcag
                                                                     3480
cacccagttt aatggttgca ttttctgtac taaggaactg tcccaggctc cggtaaatga
                                                                     3540
tgaacaccaa ctttgcaagc ccattcctgc tgttctgttt gacggtattt gcggacagtt
                                                                     3600
ggattgagct gcctgctcct ttgatgccca gaggaaattt aaagtcttgg atctgtcctt
                                                                     3660
ctgtactgag tacggcaact tccaggacaa tattttctgt gggcattgag acccttgttg
                                                                     3720
gttctaaaag attgtcagct aggacaaaag ctccttcttc caatgtatcg agtaacattg
                                                                     3780
ttgcagtatg tgcttgttca gaagaattca tatgtttcca tgattccaaa gcttcaggtc
                                                                     3840
tcagaaggtt gtccactgtg tcaacaattg ccttaaggta agccctgcat gtcttctctc
                                                                     3900
gtttttggag cttgttataa ctccgtccag ctgaatcttt ttcactaggt ttcagttcct
                                                                     3960
gcagctgtgc atcaaggatg tccaccaact gctccatcaa tctcactgaa gaacttacat
                                                                     4020
ccccagcaaa cactggccct ttggtatgtt tagccagttc attggcaaqa ctagcagcat
                                                                     4080
tttctccgct tctgatcttc tgagccagct gattcaccca gtgtgaggta cagttgctaa
                                                                     4140
gatcggggcc cttagggttc catgttccag tggaaatcat gcagagatat gaggcagttc
                                                                     4200
ctcttgttcc cttagggcat ggtcgttcaa ccatcattcc cctttgtgtc tgaggccact
                                                                     4260
ttatcccctt ggagtctaat gcttcacaga atctctctgg caggggaaaa atattgtta
                                                                     4320
taggtggaat tttggttgta gaaactgctg gaggtggttt tgtccctttg cttccttcct
                                                                     4380
```

```
<210> 3488
<211> 1224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1152)...(0)
<223> similar to gi3347848 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3488

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tttttttcag atttaaaccg tctttatttc tacagcaaca tcttgaaaat agagagcagc
                                                                       60
cgcctcaccc gcaacagggg gagccctcc tgccaccagg ggaccgtcgc cgccctcgc
                                                                     120
gagaagaggg acgagggtgc cgaagggccg gcgagtgctt agtgttcttg gctctggggt
                                                                      180
ctggggaggc caggccactg agtctatggt ggagactcca gccggcacct cctgctgqcc
                                                                      240
cgaacctagg gaagagggcc ctgctggaag gaataaataa gggatggagc tggagtgggc
                                                                      300
aggcccagcc tccagggctc aggctgagat gacaagggag aaggttaccc tgagattgaa
                                                                      360
cagaaaagac aggggctgtg ggagagacag gcgggacaag cagcaggccc atgcgcaggg
                                                                      420
ctggggtgag gggggtgtgc caggtgggcg ctctggtgac tggctgcccc ttcaqcatta
                                                                      480
gcccaccagg gagcttcgtc gggagaggtc catggagctg gagctgagag tgcgqctqtc
                                                                      540
agagagacct gtgcctccag gctgggtcgg ctcttccacg ctcttgttga ggaagttgag
                                                                     600
ggaactggcc cgcttcatcc tggggttagg gggctcctgg ggggtgcccc cctqcaqctt
                                                                     660
ctttaccagc atctcactgc tgcgcctcag ggcatcccgg agtttcccaa aggacccgct
                                                                     720
gcgcctcaag gagccactgc catccccatt ccactcagct gtaggtccca cgtcctcgag
                                                                     780
gtcagactca gaccgaggcc cggcaccccc agccatgtct cggctgctgc ggcggtctcc
                                                                     840
ccgcctgcca ctgccatctt tcagcagttc taccaccttg gtctggcttg cggggtccaa
                                                                     900
accetgaggg aggggcaggg geateaggea gtgaatggae cacacceagg gecacacagg
                                                                     960
tgtctgccca cccctcctg catggagccc cacctgcttg cggttacggc tggcacagtc
                                                                    1020
ctctagtgtg tgcgcggctt ccagcttgcc ctggcgccgg tatagggccc ccaagctgcg
                                                                    1080
cagggtggtg ttgactgtgg ggctgtggat gggacagtct caaactccat gttccccag
                                                                    1140
acccagggcc catcctggca cccagcccac agtgggccct gaggaagcat ggacctccgg
                                                                    1200
ggtagccaga atccattcct tccc
                                                                    1224
     <210> 3489
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<400> 3489
atgaatgctg tgggaagtcc tgaggggcag gagctgcaca agctggggag tggaqcctqg
                                                                       60
gacaaccccg cctacagtgg tcccccttcc ccacacggga cgctgagagt ctgcaccatc
                                                                      120
tecageaegg ggeeteteea geeceaaeee aagaageetg aagatgaaee eeaggagaeg
                                                                      180
gcatacagga cccaggtgtc cagctgctgc ctccatatct gtcaaggcat cagaggactt
                                                                      240
tggggaacaa ccctgactga gaacacagct gagaaccggg aactttatat caaqaccacc
                                                                      300
ctgagggagc tgttggtata tattgtgttc ctggtggaca tctgtctact gacctatgga
                                                                      360
atgacaagct ccagtgctta ttactacacc aaagtgatgt ctgagctctt cttacatact
                                                                      420
ccatcagaca ctggagtctc ctttcaggcc atcagcagca tggcggactt ctgggatttt
                                                                      480
gcccagggcc cactactgga cagtttgtat tggaccaaat ggtacaacaa ccagagcctg
                                                                      540
ggccatggct cccactcctt catctactat gagaacatgc tgctgggggt tccqaqqctq
                                                                      600
cggcagctaa aggtccgcaa tgactcctgt gtggtgcatg aagacttccg ggaggacatt
                                                                      660
ctgagctgct atgatgtcta ctctccagac aaagaagaac aactcccctt tgggcccttc
                                                                      720
aatggcacag cgtggacata ccactcgcag gatgagttgg ggggcttctc ccactggggc
                                                                      780
aggeteacaa getaeagegg aggtggetae tacetggaee ttecaggate eegaeagggt
                                                                      840
agtgcagagg ctctccgggc ccttcaggag gggctgtggc tggacagggg cactcgagtg
                                                                      900
gtgttcatcg acttctcagt ctacaatgcc aatatcaatc ttttctgtgt cctgaggctg
                                                                      960
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<210> 3490

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1020
gctgatccgc tatgtcagca actgggactt ctttatcgtt ggctgtgagg tcatcttctg
                                                                1080
cgtcttcatc ttctactatg tggtggaaga gatcctggag ctccacattc accqqcttcq
                                                                1140
ctacctcagc agcatctgga acatactgga cctggtggtc atcttqctct ccattqtqqc
                                                                1200
tgtqggcttc cacatattcc gaaccctcga ggtgaatcgg ctcatgggga agctcctgca
                                                                1260
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                                                                1320
catqaatgct gtcaacctct tcttcgcctg gatcaagata ttcaagtaca tcagcttcaa
                                                                1380
caaaaccatg acccagetet cetecaeget ggeeegetgt geeaaggaca teetgggett
                                                                1440
cgccgtcatg ttcttcattg ttttcttcgc ctatgcccaa ctcggctacc tgcttttcgg
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gacccaagtg gaaaacttta gcactttcat caagtgcatt ttcactcagt tccggataat
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cctcggggac tttgactaca atgctatcga caatgccaac cgcatcctgg ggccctgccc
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tactttgtca ccctatgtct tcttcgtctt cttcgtgctc ctggaacatg ttcctgggcc
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ctgcaacttt ctgacctcct gaaacagggc tacaacaaga ccctactaag actgcqtctg
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aggaaggaga gggtttcgga tgtgcagaag gtcctgcagg gtggggagca ggagatccag
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tttgaggatt tcacccaaca ccttaaggga actgggacac gcagagcatg aaatcactga
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gctcacggcc accttcacca agtttgacag agatgggaat cgtattctgg atgagaagga
                                                                1980
acaggaaaaa atgcgacagg acctggagga agagagggtg gccctcaaca ctgagattga
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gaaactaggc cgatctattg tgagcagccc acaaggcaaa tcgggtccag aggctgccag
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gcacccgcag ccagccccag ctgtgacccc agacccctgg gggagtccag ggtgggcagg
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aggatettet geaagagget geeteetggt ceaetgaace tggaaactga gtgggettta
                                                                2520
accaggagat aaaaatggag cctgaaggga atcaggcaag gaaatgaact caggattcag
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ttccatg
                                                                2647
```

```
<211> 2354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (562)...(679)

<223> similar to gi3493529 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
tggcttattg atgggagcat tgtatgctgc tgaaacctcc ttacttgggg gttctcccca
                                                                      180
gagacagaga agaaaaccta aggcaggcat tagtcttgga aaccagtacc agctagtatc
                                                                      240
tcatgccaat gaaaagcatc caggacaagc atgtttgcaa aaaacaagca tgtcctgtct
                                                                      300
ctttcacatc tctggcacat ccatgatcac cctgagtcag acccaaataa ggggcagcag
                                                                      360
agacagccag atgaagcagc aatttgaggg tagtaactgg tgatgacaaa qcccttctca
                                                                      420
attttacttt attaacttag ccaaggctta gttcctgttt tgcagcctga tggaaattta
                                                                      480
```

```
atagatcatt tgaagtatgt aatcacctga catgctaagt gtctgtgtgt gccggagaca
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cagaatggca acctgaccc accctgtcct tgtctaggaa acacgctgga gaagaaaggt
                                                                    600
ggcaaggagt ttgtggaagc tgtcctggaa ctccggaaaa agaacgggcc cttgggaagt
                                                                    660
agctggaggt gaggtgggaa agccaccgtg cttatctggt tgtgacacat gcagtattag
                                                                    720
gaaagccatt ttgtgagagg gcttagaatt cagaggtgtg tggcagcaca gccgcatctt
                                                                    780
caagatggag gccaaggaca gcctgtagct ttacatctta gagtttcacc acatgcaggt
                                                                    840
tgtctgggaa aatcaccttt gcatttttt ttattactta aaatagctcc tatatgtttg
                                                                    900
atgtctagat cacaaatttt aagaaattat aggagctgag tttggtacat ctaagagctg
                                                                    960
agagtgagtg atactgagcc atctgcaaaa ctgctggtga gagatacaaa ttaaaaatct
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tcagccatct gtgtgtgtaa gaggaaacat ataaatacac atttctcatt tgccaattac
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accttccctg gtataagggg aagaaacga cttggcatct gatgtgggga gaattattgc
                                                                   1140
taagacctgg aggcagggta cttcttactg cttcaggcct gaatttaggt ggtcatttgg
                                                                   1200
ggtgtgcagg acagagcacc tcctaaggac ctgagagtcc agtcagtggg gaggcccagc
                                                                   1260
tececeacea actgtgtgag gacagateae ceaetteete acttgggget etggtttet
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cttcttacta cccgattcca atgcctattg tgtcttttaa atcctctgtt ttaaaaatga
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atcttaagct ctctcggagg gtccaccagg ccgtgcacct ctattcccag tgacaaatga
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caccccttcc aggctagtct caggatccag taggattccc tttgctgatc tgtgcctttg
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acctctgctc tgccacttct gttttacctg caaggggcat gacatacagg gtagtaatta
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2280
ccaaatacaa aaagtttgga tgttttactt tagcagtggt gtggagactc tggtgtgctc
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ttgtatagaa gcgt
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```

```
<210> 3491
<211> 1030
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(798)

<223> similar to gi5912208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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tccagttgca caaatgggta actatcagga atatctgaag acattggctt ctccactgcg 120
agagattgat ccagaccaac ccaaaagact gcatactttt ggcaatccgt ttaaacaaga 180
taagaaggga atgatgattg atgaagcaga tgagtttgta gcagggccac aaaacaaagt 240
gaaacgtcca ggggaaccca acagtcctat gtcatctaag agaaggcgga gtatgtccct 300
```

```
gctgttgagg aaaccacaaa caccacctac tgtaactaac catgtgggcg gaaagggacc
                                                                      360
acceteagee tegtggttee catettatee aaaceteata aaacecacee ttgtacatae
                                                                      420
agatgetaet ateatteaeg atggeeatga ggagaagatg gaaaatqgte agateaeaee
                                                                      480
tgatggcttc ctgtcaaaat ctgctccatc agagcttata aatatgacag gagatcttat
                                                                      540
gccacccaac caagtggatt ctctgtctga cgacttcaca agtctcagca aagatgggct
                                                                      600
gattcaaaaa cctggtagta acgcatttgt aggaggagcc aaaaactgca gtctctccgt
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agatgaccaa aaagacccag tagcatctac tttgggagct atgccaaata cattacaaat
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cactcctgct atggcacaag gaatcaatgc tgatataaaa catcaattaa tgaaggaagt
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tcgaaagttt ggtcgaagta agtagggaaa gaacatctat caataatgca ccaggagggt
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cctctcattc tgtgattcac tatagattca agctatccct tgaggtacac tgggggcaat
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attgggcttt cacataattt aaggcagttc ctcttgtttt aactaaaaag gtacagccta
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atcaaaagat
                                                                     1030
```

```
<210> 3492

<211> 8053

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3586)

<223> similar to gi1665825 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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<400> 3492 gctttccttt ctaaagtaga agaggatgat tatccctctg aagaactact agaggatgaa 60 aacgctataa atgcaaaacg gtctaaagaa aaaaaccctg ggaatcaggg caggcagttt 120 gatgttaatc tgcaagtccc tgacagagca gttttaggga ccattcatcc agatccagaa 180 attgaagaaa gcaagcaaga aactagtatg attttggata gtgaaaaaac aagtgagact 240 gctgccaaag gggtcaacac aggaggcagg gaaccaaata caatggtgga aaaagaacgc 300 cctctggcag ataagaaagc acagagacca tttgaacgaa gtgacttttc tgacagcata 360 aaaattcaga ctccagaatt aggtgaagtg tttcagaata aagattctga ttatctgaag 420 aacgacaacc ctgaggaaca tctgaagacc tcagggcttg caggggagcc tgagggagaa 480 ctctcaaaag aggaccatga gaacacagag aagtacatgg gcacagaaag ccaqgqqtct 540 gctgctgcag aacctgaaga tgactcgttc cactggactc cacatacaag tgtagagcca 600 gggcatagtg acaagaggga ggacttactt atcataagca gcttctttaa agaacaacag 660 tctttgcagc ggttccagaa gtactttaat gtccatgagc tggaagcctt gctacaagaa 720 atgtcatcaa aactgaagtc agcgcagcag gagagcctgc cctataatat ggaaaaagtc 780 ctagataagg tetteegtge ttetgagtea caaattetga geatageaga aaaaatgett 840 gatactcgtg tggctgaaaa tagagatctg ggaatgaacg aaaataacat atttgaagag 900 gctgcagtgc ttgatgacat tcaagacctc atctattttg tcaggtacaa gcactccaca 960 gcagaggaga cagccacact ggtgatggca ccacctctag aggaaggctt gggtggagca 1020 atggaagaga tgcaaccact gcatgaagat aatttctcac gagagaagac agcagaactt 1080 aatgtgcagg ttcctgaaga acccacccac ttggaccaac gtgtgattgg ggacactcat 1140 gcctcagaag tgtcacagaa gccaaatact gagaaagacc tggacccagg gccagttaca 1200 acagaagaca ctcctatgga tgctattgat gcaaacaagc aaccagagac agccgccgaa 1260 gagccggcaa gtgtcacacc tttggaaaac gcaatccttc taatatattc attcatgttt 1320 tatttaacta agtcgctagt tgctacattg cctgatgatg ttcagcctgg gcctgatttt 1380 tatggactgc catggaaacc tgtatttatc actgccttct tgggaattgc ttcgtttgcc 1440

```
attttcttat ggagaactgt ccttgttgtg aaggatagag tatatcaagt cacggaacag
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caaatttctg agaagttgaa gactatcatg aaagaaaata cagaacttgt acaaaaattg
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tcaaattatg aacagaagat caaggaatca aagaaacatg ttcaggaaac caggaaacaa
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caatgctgca agaagaacct gtgattgtaa aaccaatgcc aggaaaacca aatacacaaa
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gtggagaatg ctcccctcca ttgacagtgg agccacccgt gagacctctc tctgctactc
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```
acttcagaca ttttaattac agtaataata gcactccttt taaggagttt cagatccaca
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gcacactttc taagcaggaa aactatcaga tcagggtgaa tttaggccac ttcagaggtg
                                                                     7380
ctgcctataa acatccagac agaccttctt aggcagcaga actggtccca ttcctctcaa
                                                                     7440
agcagtttga cactacccta cccacatcaa cccaaagctt gacgttaagt caaaagagca
                                                                     7500
tattggagca aaagtgaaca gatgtgtaaa ctctagcaca ttcttattgc tgtattaagt
                                                                     7560
ctgaagatga gcacatccta cccacaacag tattgttcca ggaagcaggg taggagtagt
                                                                     7620
ggtaaattag aaaatagact attaattgca caattaatag aaaagtaaaa acatgtttca
                                                                     7680
aaatctacaa taaacctgta tcccaaggag tcctatacgt cagtgtgatg tgctggactc
                                                                     7740
tgaattctgt ggtacagctt tgcattggac tccgtccggc ctactggtct gggtacggct
                                                                     7800
tgcttcctgc ctgttgaagg gtgaatatgc tacacagagc tatgatggtt tctactgagt
                                                                     7860
ggtaaaattc acagaagttc caggttcatc atgtcaggat cattccttgt gcaaagtttg
                                                                     7920
atgtagatga agataaagtg gtttcttggt caataattgc aatttctttc ttttaaagtc
                                                                     7980
agtgggtttc ttgtatagtt ctattacaat tggcccaggt ttaatttcat ccatctccat
                                                                     8040
gaaagcaaaa cac
                                                                     8053
```

```
<210> 3493
<211> 4779
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (178)...(3458)
<223> similar to gi3776088 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3493 aggagcagtc cgaggggaac gtgggttgaa cgttgcaact agggtggaga tcaagctgga 60 acaggagttc cgatcgaccc ggtaccaaga aggggagtgc ccgcggcagg gttcattgaa 120 aaaatcctta gtgatattga catgtctcaa gtgacataaa ttagccaatg actcggaatg 180 atggattete egaagattgg aaatggtttg eeagtgattg gaccagggae tgatataggg 240 atatcttcac tccacatggt ggggtatttg ggaaaaaatt ttgattcagc taaagttcca 300 tcagatgagt attgccctgc ttgtaaagag aagggaaagt taaaagcctt aaagacttac 360 cgaattagtt ttcaagaatc tatctttttg tgtgaggatc tgcagtgcat ctatcctttg 420 ggctctaaat cacttaataa cctaatttct cctgatttgg aagaatgtca cactccacat 480 aagcctcaga aaaggaagag cttagaaagc agctataagg attcacttct tttagcaaat 540 tccaaaaaga ctagaaatta tattgctatt gacggtggaa aagttttgaa cagcaaacat 600 aatggagaag tatatgacga aacctcgtca aacttacctg atagtagtgg tcaacagaat 660 ccaattagga cagctgattc cttggagcgg aatgagattt tggaagctga tactgttgac 720 atggctacta caaaagatcc tgctacagtt gatgtctctg gaactggcag accttcccct 780 caaaatgaag gatgtacatc taaactggaa atgccactgg agagcaaatg tacatcattt 840 ccccaggctt tatgtgtcca gtggaaaaat gcttatgctc tctgttggtt agactgtatc 900 ctgtcagctt tggtgcactc ggaagagtta aagaacaccg tgactggact gtgctcgaag 960 gaggaateta tattetggeg gttgettaea aaatataate aageaaatae aettetatat 1020 accagtcaat tgagtggtgt taaagatgga gattgtaaaa aacttacctc agaaatattt 1080 gcagagatag agacctgtct gaatgaagtt agagatgaaa tttttattag ccttcagccc 1140 cagcttagat gcacattagg tgatatggaa agccctgtgt ttgcatttcc cctgctctta 1200 aaactagaaa cccacattga aaagctcttc ctatattctt tttcttqqqa ctttqaatqt 1260 tcgcagtgtg gacaccaata tcaaaacagg catatgaaga gtctggtcac ctttacaaat 1320 gtcatccctg agtggcaccc acttaatgct gcccattttg gcccatgtaa caattgcaac 1380 agtaaatcac aaataagaaa aatggtatta gaaaaagtat ctcccatatt catgttgcac 1440 1500 ctttatcaga taacttctgt aattcagtat cgagcaaata atcattttat aacatggatt 1560 ttagatgctg atggaagttg gctggaatgt gatgacttaa aaggcccatg ttctgaaagg 1620 cacaagaaat ttgaagttcc tgcttcagag atacatattg ttatttggga aagaaaata 1680 tcccaagtga cagataaaga agctgcctgc cttccactta aaaagactaa tgaccaacac 1740 gctctcagta atgagaaacc agtatcttta acatcgtgtt ctgtgggtga tgctgcctca 1800 gctgaaacag cctcagtaac tcaccctaaa gatatatcag ttgcccctcg tactctttca 1860 caggacacag ctgtaactca tggagatcat ttactttcag gtccaaaagg tttggttgac 1920 aatattttac ctctgacact tgaagaaact atccagaaaa cagcctcagt ttcacagtta 1980 aattetgaag ettteetgtt tagaaaataa aeetgtagea gaaaataeag gaatteteaa 2040 aaccaatact ttgctatcac aagaatcact aatggcttct tcagtatcag ctccatgtaa 2100 tgaaaagctt attcaagacc aatttgtgga cataagtttt ccatcccaag ttgtaaatac 2160 aaacatgcag tcagtacagc tgaatacaga agatactgta aatactaaat ctgtgaataa 2220 tactgatgct actggtctta tacagggagt gaagtcagta gaaattgaga aggacgctca 2280 gttaaaacaa ttccttacac caaaaactga acaattaaaa ccagaacgtg tcacatctca 2340 ggtatctaat ttgaagaaaa aagaaactac agcagattct caaaccacaa catctaagtc 2400

```
attacagaat cagtctctga aagaaaatca gaagaagcca tttgtgggaa gttgggttaa
                                                                     2460
aggettaata ageaggggtg ettettttat geeactetgt gtttcagete ataatagaaa
                                                                     2520
cactataact gatttacaac cttcagttaa aggggtaaat aattttggtg gctttaaaac
                                                                     2580
taaaggtata aaccagaagg ccagccacgt atccaaqaaa gctcqtaaqa gtqcaaqtaa
                                                                     2640
gcctcctccc atcagtaagc caccagcagg ccctccatcg tctaatggca cagctgccca
                                                                     2700
cccacatgct catgctgctt cagaagtttt ggaaaagtct ggaagcacct catgtggagc
                                                                     2760
tcaactcaac cacagttctt atgggaatgg tatttcttca gcaaaccatg aagacttggt
                                                                     2820
qqaaqqtcaq attcataaac ttcgtctaaa acttcgtaaa aagctaaagg cagaaaagaa
                                                                     2880
gaaattagct gctcttatgt cttccccgca aagcagaaca gttcgaagtg aaaatctaga
                                                                     2940
acaggtgccc caggatgggt ctccaaatga ttgtgaatca atagaggact tgttaaatga
                                                                     3000
gctaccatat ccaattgata ttgccaatga gtctgcatgc accactgttc ctggtgtttc
                                                                     3060
cctgtacagt agtcaaactc atgaagaaat tttagcggaa ttattgtctc ctacacctgt
                                                                     3120
ttcaacagag ctgtcagaaa atggggaagg tgactttagg tatttgggaa tgggagatag
                                                                     3180
tcatatccca ccaccagtac caagtgaatt caatgatgtt tcccagaaca cacatctgag
                                                                     3240
acaggaccat aattattgta gccccaccaa gaaaaatcca tgtgaagttc agccagactc
                                                                     3300
tctgacaaat aatgcctgcg ttagaacatt aaacttggag agtccgatga agactgatat
                                                                     3360
tttcgatgag tttttttcct cctcagcatt aaatgcttta gcaaatgaca cattagacct
                                                                     3420
acctcatttc gatgaatatc tgtttgagaa ttattgaatt aatgcttgtt aacttttttc
                                                                     3480
atataatatt tattattatt agaagaactt acaatgtgtt caggtagtgt ttatacactg
                                                                     3540
gacttgtgta attacttgtg taataaccat gaacaaaatg caaggtttaa cctttggttc
                                                                     3600
tgcccatgaa gcatgtaatc tttcttacac attaaaatca ctgaatgtgt tctccttttt
                                                                     3660
ggtttcattt tgttcttgtg agagtatgag gatttcaaaa tgttaaagat gaaaagtggc
                                                                     3720
gtctagtttc tgacagtttg tacagttgga tgcattacat ttttagattt gaagttttgg
                                                                     3780
ttatgttagt gttatgagtg atctttgtgg ggttttcttc ccctggaaac ctgttgctcg
                                                                     3840
tggcgctttg cccacggtgc ccgagttctt gtcctgtgtc cagatatgca gacaaatgaa
                                                                     3900
gggtgaagaa gatgaagagg agctttattt agtgttagaa cagctcagag gagacccaca
                                                                     3960
gtgggtagct cccctctgta ggcaggcagg tcataccctc agtgttcagt gctcagcaga
                                                                     4020
gaggaggccc ttggagaggg tagttcctcc ctgcaggcag gtcatttggt catttggtgg
                                                                     4080
tctctgcaga tctctgaagt tctcagcaga gaaggtggct cctctctgca gctggttgtt
                                                                     4140
ccctcatctg ctcaactctg gctgagccca gggctttcat gggcctcaga ggggttattg
                                                                     4200
ttggaggact gggtagactc caaactgcaa caacagctgg gtgtggtggc tcacgcctgt
                                                                     4260
aatcccagca ctttgggagg ccaaggctgg cagatcactt gaggtcagga gttcaagacc
                                                                     4320
agcctggcca acatggtgaa accccatctc tactaaaaat acaaaaatta gctgggcgtg
                                                                     4380
gtggcacatg cctgtagtcc cagctatttg ggaggctgag gctgcagtga gccgagattg
                                                                     4440
cgccactgca ctccagcctg ggcgacacag tgagactcca tttcaaaaaa aaaaatattt
                                                                     4500
tctaggccag gtacagtagc tcacacctgt aatccagcac tttggaaggc caaagaggga
                                                                     4560
agatcacttg agcccagcag tttgagacca ccctgggcaa catggcaaga ctctgggcgt
                                                                     4620
ggtggtgctc acctgagatg tcagctactc agaaggctgg ggtgggagga ttgcttgagc
                                                                     4680
ccagcagttt gaggccacag tgagccatga tcgtgccact gcactccagg ctaggtgaca
                                                                     4740
gggcaagacc ctgtctccag aaaaaataaa gaaattttt
                                                                     4779
```

```
<210> 3494
<211> 1528
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(226)
<223> similar to gi836883 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3494
cagagggttt gataaagtgc tctggacccc tcgggtgctg tcaaatggcg tccagttctc
                                                                       60
gcgcatcagt ccagatggtg aagaaggcta ccccggagag ttaaaagtct gggtgacata
                                                                      120
caccctggat ggcggagagc tcatagtcaa ctacagagca caagccagtc aggccacacc
                                                                      180
agtcaacctg accaaccatt cttacttcaa cctggcaggc caggcttccc caaatataaa
                                                                      240
tgaccatgaa gtcaccatag aagcggatac ttatttgcct gtggatgaaa ccctgattcc
                                                                      300
tacaggagaa gttgccccag tgcaaggcac tgcattcgac ctgagaaagc cagtggagct
                                                                      360
tggaaaacac ctgcaggact tccatctcaa tggttttgac cacaatttct gtctgaaggg
                                                                      420
atctaaagaa aagcattttt gtgcaagggt gcatcatgct gcaagcgggc gggtactaga
                                                                      480
agtatacacc acccagcccg gggtccagtt ttacacgggc aacttcctgg atggcacatt
                                                                      540
aaagggcaag aatggagctg tctatcccaa gcactccggt ttctgcctgg agactcagaa
                                                                      600
ctggcctgat gcagtcaatc agccccgctt ccctcctgtg ctgctgaggc ctggtgagga
                                                                      660
gtatgaccac accacctggt tcaagttttc tgtggcttaa ggaagtgtga agatatgatc
                                                                      720
cagtccaggg ctaggctcag ccacctgtct cctgtccaga aaaaaggtga agattaagaa
                                                                      780
gctttcagaa tgattctatg gattaaaatc atacaaatgg tggctgttct gagaatcagt
                                                                      840
ctgggtattg atttcctttt ccagtgactg gctccaggcc atgtctaatg accagctcga
                                                                      900
ttccctgtgc agttcagaga gcaagtgaac ccaaccaaca atgtcgtcat ctaagccctg
                                                                      960
accctagcca gggactccca tgctgctgtt ggctccatct ctccacactg cctctttctt
                                                                     1020
ttcaactttt tgcccttcct ttctttaaag ctattctcac attgctttta tttcctcctc
                                                                     1080
cttcacctcc aaccactgtc agcagcactc tggagttttc aaatgtcaca ttagcctcac
                                                                     1140
cctgcatgct aggagatgga cctgtctcta tacagcagta gatgattgat aagtgaggaa
                                                                     1200
actgaggett acagaggttg aagaccaaca agctaataaa taaaaagttg aggccgggca
                                                                     1260
cggtggctca cgcctgtaat cccagcactt tggaaggccg aggcaggcgg atcacgaggt
                                                                     1320
caggagatcg agaccatcct ggctaacacg gtgaaacccc gtctctacat aaaaaattag
                                                                     1380
ctqqqtqtqq taqcacqcac ctqtaqtccc agctacttqq qaqqctqaaq caqqaqaatc
                                                                     1440
gcttgaacct gggaggtgga ggttgcagtg agccgagatc atgccactgc actgggcaac
                                                                     1500
agagcaaaac tcgatctcaa aaaaaaaa
                                                                     1528
    <210> 3495
    <211> 1404
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (13)...(959)
    <223> similar to gi5926736 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3495
ggaattccct gtacagagat gggcaatttt gacaatgcta atgtcactgg agaaatagaa
                                                                       60
tttgccattc attattgctt caaaacccat tctttagaaa tatgcatcaa ggcctgtaag
                                                                      120
aaccttgcct atggagaaga aaagaagaaa aagtgcaatc cgtatgtgaa gacctacctg
                                                                      180
ttgcccgaca gatcctccca gggaaagcgc aagactggag tccaaaggaa caccgtggac
                                                                      240
ecgacettte aggagacett gaagtateag gtggeeeetg eccagetggt gaeeeggeag
                                                                      300
ctgcaggtct cggtgtggca tctgggcacg ctggcccgga gagtgtttct tqgaqaaqtq
                                                                      360
atcattcctc tggccacgtg ggactttgaa gacagcacaa cacagtcctt ccgctggcat
                                                                      420
ccgctccggg ccaaggcgga taaatacgaa gacagcgttc ctcagagtaa tggagagctc
```

480

```
acagtccggg ctaagctggt tctcccttca cggcccagaa aactccaaga ggctcaagaa
                                                                      540
gggacagatc agccatcact tcatggtcaa ctttgtttgg tagtgctagg agccaagaat
                                                                      600
ttacctgtgc ggccagatgg caccttgaac tcatttgtta agggctgtct cactctgcca
                                                                      660
gaccaacaaa aactgagact gaagtcgcca gtcctgagga agcaggcttg cccccagtgg
                                                                      720
aaacactcat ttgtcttcag tggcgtaacc ccagctcagc tgaggcagtc gagcttggag
                                                                      780
ttaactgtct gggatcaggc cctctttgga atgaacgacc gcttgcttgg aggaacccag
                                                                      840
acttggttca aagggagaca cagctgttgg cggggatgca tgctcacaat cgaagctcca
                                                                      900
gtggcagaaa gtcctttcca gccccaatct atggacagac atgactcttg tcctgcactg
                                                                      960
acatgaaggc ctcaaggttc caggttgcag caggcgtgag gcactgtgcg tctgcagagg
                                                                     1020
ggctacgaac caggtgcagg gtcccagctg gagacccctt tgaccttgag cagtctccat
                                                                     1080
ctgcggccct gtcccatggc ttaaccgcct attggtatct gtgtatattt acgttaaaca
                                                                     1140
caattatgtt acctaagcct ctggtgggtt atctcctctt tgagatgtag aaaatggcca
                                                                     1200
gattttaata aacgttgtta cccatgtcct ccagtgctta tcaaatgagg taaaaggccg
                                                                     1260
gctggtgggc atggtgactc ccccctgtga tcccagcaac tttgggaggc tgcagtggat
                                                                     1320
ggcttgagct cagaagtgtg agatcagccc aggcaacata gataccctgt ctacaaaaaa
                                                                     1380
accaaaaaat tatccagggg tggg
                                                                     1404
```

```
<210> 3496
     <211> 1816
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1698)...(0)
     <223> similar to gi1552275 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3496
ttttttttt ttcaaacgca tgatgagctt tgttttgtga gtaaaacata atacgcaaaa
                                                                       60
gaagtatgct tgtagggggg tcttgggtcg tcatttcttt tctgtttctg gtttgttttt
                                                                      120
ggagagagtc tggctttgtc gcccaggctg gagtgcagtg gcgcgatcac ggatggctgc
                                                                      180
agctcctggg gcttcgcttc ctgattcggt tgtcctattt tcagttcact cctcaggcgc
                                                                      240
ggaggaaatg gtggaaggcc cagctctggg tgatcctggg cgctgccccc gttacccgtt
                                                                      300
accaggaaga atggtgagcc tggcaggtca cagcacgagc gtgcacaggc ccagcagggc
                                                                      360
catcagcagc agcgggagct ggggcacggg cgtggtgcca gaggcataca gacaggtggt
                                                                      420
gtaagcgtca atgtccacct ggcgcatggc acacacgtgc tgcatgctgc aggcctcgtc
                                                                      480
gcagacccca gcagagtagc tgactgagtt atagacgtag tagcgctgca gtgtgctctg
                                                                      540
gtcgccagcg atgcggtcca gcactgtgtg catggagtgg gcgctggcgt ccggcacccc
                                                                      600
ataggeeteg gteagetggt actegagete eeagegegge gteecetgag cattegeetg
                                                                      660
gctcaggttc atgaagtagg tcaccatgtc cttcaggctc agtgtggctc ggtcatattc
                                                                      720
gaacacccgg atggctggat tgttggcccc attgaccact ccaggtaatg tggttttcca
                                                                      780
tggggtgact ccaggtgtga tgaacatggc gcttatgggg acacctgcat catcatagag
                                                                      840
catccgaaag ctgtcggtgt ggtggtgccc gaagaactgc cctgctatga cgcgatgatg
                                                                      900
cttccggacc accttcaggt atttttcatt gaagccctcc cggaaccatg ccttgttttg
                                                                      960
cgtcttctca aagaaccccg ggggcacgtg gccgacaatg tacaccatgt ccccagcttt
                                                                     1020
ggatgcatcg gtcagcacat cttccagcca ctggaactgc tggccagggt ccgccatgtc
                                                                     1080
tgctgtcagc gcattgctgg tatagtacag attggtgttg aggaccacaa ttcgcccagc
                                                                     1140
cccgctggga cccggcagct tctcacagta gaaggcacct tttttgaaga gagcgatgga
                                                                     1200
ctcattacta agccagggtt tccatagttc tgctatctga ttgtagatgt tgttacttcc
                                                                     1260
```

```
agctgggaac tggtttttgg ggtgaaaatc atgatttccc aaagcagcat agactttagt
                                                                     1320
atctggaaag acctctctga tgagcttggt caggcgttcc acaatttcca gtacagctgc
                                                                     1380
ctctcccagt ttctcatcgg gcacatgagg cgtgtcatca ccagtccaga gaatgaagtc
                                                                     1440
tggctctggc tcaatctcct tcatggcata gatggaggag ttgatgaggg cccagggaga
                                                                    1500
atcacagagg tagtcacccc aggggcctgc gtcgggcact ggctgggatc cagctgatgg
                                                                    1560
gcacacctgg aaggggtctt tggatacctt gtagtcaggg tcaaggtgca ggtcagcgat
                                                                    1620
gtgccagaac ttccctggtt cagccctggc acctccccag ttagccagga aaatcagcca
                                                                    1680
ggcgagcagc ctcatcctcg gggctcactt ccccagagcc gtgggattct ccaggcactg
                                                                    1740
ttgttgttct caccacaggc ttcctaagta gttttctgtg gccacgtgcc ggagcaggac
                                                                    1800
tccttgtcct gttacg
                                                                    1816
```

```
<210> 3497
     <211> 466
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (343)...(146)
     <223> similar to gi4519602 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3497
tttgagcctt tgtagatcac tagtccatgc ggtggaattc ggaggggcgg ccctgcggtt
                                                                       60
getetgtaca agteegggtt ggtgaeggee ceageagtee ceacagggee eetggggge
                                                                      120
gcaggaagtg ggcaggcgcc tctagatgaa atattccctc ttgtcgtccc ctcctgactg
                                                                      180
cccgccttct gcattgatga tggccgtgtc cgcgtctgga gcatcgtcgg agccttttgc
                                                                      240
ctcatgtgtc agtggccgag gaagatgagc atgatgagca gcaggaagac aatgaaagcc
                                                                      300
acgatcccac cgatgatggc gtgtcccgcc cacttaagga tattcctgga agaagatgca
                                                                      360
gtagctcctt ctaccaccag gcgtcagcac tggaaacaga cgcagtccaa caggactccc
                                                                      420
tctgcctggc tgttgagcac aaagcagagg ggagatcagc aagata
                                                                      466
```

```
<210> 3498
<211> 3344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3345)...(677)

<223> similar to gi5689457 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3498 ttttttttt ttcaaagtac ataaaacttt taatgaatta actttacaaa agacaaatgg 60 catcaaaaca tcagacgagt ttgatacaaa actggtccta ggctgtgagg actaattctg 120 gtgacggatg gcgacgtgct gctggcatga gacacacgga gcagagggac gagagccgtg 180 ggtcccaacg ggggcccttg gacaccactg gcaatgagac aatgggtgag cacagagtcc 240 acgtggggga cagaatcaac ttattcacga atactgtgtg tttgaatatc agatgagcag 300 atgcggttgg cgaggctacc atattttcca gaaaagaaca tgccccagaa gataatatac 360 accccctagt tttattgcct taagaatgtg tgtgtgtttc acctttctcc tctgttagtt 420 ctcccagtgc ttttcttcta tcacgcgcgc tccttttccc ttttgcttag gagcaagcac 480 agtgcaagtg gcagaacgat ctgggcacac atcagacacc aaacggtatg ccactgggtc 540 acgagaacga gtctgcagag gctccatagg acagacagca cgcacatcaa aaacaaggga 600 cagaagttgc agtcagaaag tgtgtgatac cttcctgaaa atacagtctt cttgccaaaa 660 tgaaggtgac tetteaggat gecaegttge tetgggaaag ggaeettgae atttetgtgt 720 ttacaaagta cgtcttcagg tccccctttc ctttcacgtt gattattcct cgacaggtgc 780 acgtgtatcc gagggtctgc aggacgaggc tcgtctcctc ggtaacctgt attttgtcca 840 ggactccggt gctgtccatc ctactggcca cattgacagt gttgccccag atatcatatt 900 gtggcttctg agctccaatc acaccagcta tcacaggtcc atggttaata cccactcgca 960 atttgaagtc gttgaaggag tgcttgttga tggcatccag cttccctacc cagggcaaaa 1020 gcaaactacc accatggtgc caatgtgcat gtactgtcgc tcgggctcct gggagtgctc 1080 ctggctgggc acagcgctca gacctgttgc tgccatgtat gtgctgccaa tggtcttaat 1140 cttttcaact ccactgaatt ttggcttgga aagaagatca tcaaaagtca gcgatgatct 1200 cgttcacgga gccgaaggca ttccaagccc tccttgttca cgtcggattc tgtataaaat 1260 tctttgaaat ccggaatgga ggcaaacatg acgcagacgc agtcatagga ctggtggtat 1320 ageteeteat tetteagget eetggeeagg aagtgeteag eecaegtgeg egggaageae 1380 gttctccagc agcacgcggt tcaggttctc catggtctct atctcctccc gctcttttt 1440 gaatttgttc ttccataaga agtctaacct acagtaatat tcattctgtc tacccagaac 1500 aagcagtgtg atgaagaata tagagagaga cacagagccc atggtcttca ggtctttcca 1560 aatgcctggt ctctcaaata agacctggct gtagtcgccc aggacgtggg cgtgggtgtg 1620 gagtaggatg gtgttgtagc ccaccaaggc caccatcatg atcaacatct tcagctcata 1680 gtttacccgc aggaacaccg gaacaggata tcagtcccag aatgcagctg tagataaagt 1740 acgggaggaa aaataaaatt tgcgcacgca gaatcgccac ctgattattt gaggctgaaa 1800 agcttgtgtt tgttgtgttg gcagttggag ggattgtttc ctctgagtca ctcaggaaaa 1860 acatgttgaa cacggccatc attaatatga tggctgtggt gatgatcgtg agagagatcc 1920 gtggccaggg gcggttggca atgatgcccg aggacttcaa aagccacatg agcaggggag 1980 aggetttttt getgeattge agaagetgte cagcaaagea gaegaagagg atgaaggeea 2040 gcaagagaaa cgcagcccca aaggagatgc ccaggacaga cgtttttggc agcacgagaa 2100 tctgcacaat gaagatgcag aagaatatga gacaggcaca agtcacataa tacttgaacg 2160 ctggcagtgc cgtggcccgg tactcttttt ctagtacttt gttatagaaa agcagtgaga 2220 ttctctgaat gtcttcagac ttgagccatt gcttctgtgc attaatccca tcaattgctt 2280 gaatcatect tteatteaat tettetteaa atetettett ttgtgaettg gttettaagg 2340 tgcgattttg aaaattatgc tgacccatgg gtacatccgt ggtgctgatc ttgccgttct 2400 ctgtggtcat gctgtccctg tgatgtaggt gtgcaaaggg cttggctgcc ccccaggact 2460 ccaagtaccg ggtcatgcgg accgaggccc tcattttggc tccatcaagg gtgtggcgag 2520 gtctgaagag atgctggggg ctccgtcgtt ctcccttggg gttgatcaca aagtaggttt 2580 tcaccaggtg ctgttttaaa tatgggtccc taatgtcacc atctccctcc tccactttat 2640 aagcgccatt caagtgctcc agggtgacag aagaaatgtg aacacgtcca gggacccctc 2700 cagetteeat gtggttggee aaggteaeat catgtgaeea caeateatat tgeeaettet 2760 gcagaccaat cacgccacac aggacattcc cagaatgcac gcccacgcgc atgttgatat 2820 caactccagt agcatccctc actttcttta tggcttcaca catgtccagc cccattttca 2880 cacagttett ggeatggtta gggagagata tagggagtee agatacaeag tagtageagt 2940 ctcctaaaat tttaattctc atgcattcat tctcctttgc aatttgatca aactttccaa 3000 agageteatt cageatgtgg actagttete eeggggagea gteaettgee ageegggtaa 3060 agccaacgat gtcagcgtat aagatgctca cgtttgtatg ccgcttcaca tacaggttgt 3120 ggaagttatt tgtgttctcc atctggcccg ccttggggcc ctgcagcctc tggatgatct 3180 ccgctttcat ctccatggcg atgtgggccg gcagcaggga gagcagaagc cgctcctgtt 3240 gacgtttttc aaattccaac ttgatccgcg acttgatgca atttacaggt gtcctgatat 3300 gtttgctgaa gagcgagttc catgaggtgc ttatggtagg ctcc 3344

```
<210> 3499
<211> 2891
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2138)
<223> similar to gi4426597 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3499 atggcggagc gagaaagcgg cggcctggga gggggggccg cgtccccgcc cgccgcctcc 60 ccgttcctgg ggctgcacat cgcttcgcct cccaatttca ggctcaccca tgacatcagc 120 ctggaggagt ttgaggatga agacctctcg gagatcactg atgagtgtgg catcagctta 180 cagtgcaaag acaccctgtc cttacggccc ccgcgcgccg ggctgctctc tgcgggcggc 240 300 ggggacactc ccggggccga ggacgacgag gaggacgacg acgaggagcg cgcggcccgg 360 cggccgggag cggggccgcc caaggccgag tccggccagg agccggcgtc ccgcggccag 420 ggccagagcc aaggccagag ccagggcccg ggcagcgggg acacgtaccg gcccaagcgg 480 cccaccacgc tcaacctctt tccgcaggtg ccgcggtctc aggacacact gaataataat 540 tctctgggca aaaagcacag ttggcaggat cgggtgtctc gatcatcctc acccctgaag 600 acaggggagc agacaccacc gcatgaacac atctgcctga gcgatgagct gccccccag 660 ageggeeeeg eececaceae agategagge acetecaceg acageeettg eegeegeage 720 acagccaccc agatggcacc tccgggtggt ccccgtggtg ccccgcactg ggggtcgggg 780 ccactcgcat cgagaccgaa tccactacca gtccgatgtg cgaatagagg ccactgagga 840 gatctacctg accccagtgc agaggccccc ataatattgc agagcccacc tccgccttca 900 taccgccccc agagagccgg atgtcagtca gatttattgc agaccctgcc gcctacccct 960 ccacggcagg gcggccgcac ccctccatca gtgaagagga agagggcttc gactgcctgt 1020 cgtccccaga gcgggctgag cccccaggcg gagggtggcg ggggagcttg ggggagccgc 1080 egecacetee aegggeetet etgagetegg acaceagege eetgteetat gaetetgtea 1140 agtacacgct ggtggtagat gagcatgcac agctggagct ggtgagcctg cggccgtgct 1200 tcggagacta cagtgacgag agtgactctg ccaccgtcta tgacaactgt gcctccgtct 1260 cctcgcccta tgagtcggcc atcggagagg aatatgagga ggccccgcgg ccccagcccc 1320 ctgcctgcct ctccgaggac tccacgcctg atgaacccga cgtccatttc tccaagaaat 1380 tectgaacgt etteatgagt ggeegeteee geteeteeag tgetgagtee ttegggetgt 1440 tetectgeat cateaacggg gaggageagg ageagaceea eegggeeata tteaggtttg 1500 tgcctcgaca cgaagacgaa cttgagctgg aagtggatga ccctctgcta gtggagctcc 1560 aggctgaaga ctactggtac gaggcctaca acatgcgcac tggtgcccgg ggtgtctttc 1620 ctgcctatta cgccatcgag gtcaccaagg agcccgagca catggcagcc ctggccaaaa 1680 acagtgactg ggtggaccag ttccgggtga agttcctggg ctcagtccag gttccctatc 1740 acaagggcaa tgacgtcctc tgtgctgcta tgcaaaagat tgccaccacc cgccggctca 1800 ccgtgcactt taacccgccc tccagctgtg tcctggagat cagcgtgcgg ggtgtgaaga 1860 taggcgtcaa ggccgatgac tcccaggagg ccaaggggaa taaatgtagc cacttttcc 1920 agttaaaaaa catctctttc tgcggatatc atccaaagaa caacaagtac tttgggttca 1980 tcaccaagca ccccgccgac caccggtttg cctgccacgt ctttgtgtct gaagactcca 2040 ccaaagccct ggcagagtcc gtggggagag cattccagca gttctacaag cagtttgtgg 2100 agtacacetg ceceacagaa gatatetace tggagtaget gtgeageece geeetetgeg 2160 tececeagee eteaggeeag tgeeaggaea getggetget gaeaggatgt ggeactgett 2220

```
gaggagggc acctgccacc gccagaggac aaggaagtgg gggccgctgg cccagggtag
                                                                    2280
gggagggtgg ggcaatgggg agaggcaaat gcagtttatt gtaatatatg ggattagatt
                                                                    2340
catctatgga gggcagagtg ggctgcctgg ggattgggag ggacagggct tggggagcag
                                                                    2400
gtctctggca gagaaggatg tccgttccag gagcacacgg ccctgcccca tcctgggcct
                                                                    2460
tacctcccct gccagggctc gggcgctgtg gctcctgcct tgatgaagcc cgtgtcctgc
                                                                    2520
cttgatgaag cctgtgccac ctgcaagtgc ccgccctgcc cctgccccaa ccccaccga
                                                                    2580
agagccctga gctcaggctg agcccagcca cctcccaagg actttccagt gaggaaatgg
                                                                    2640
caacacgtgg aggtgaagtc cctgttctca gctccgtcat ctgcggggct tctgggtggc
                                                                    2700
tectgecact gaceteaceg geatgetgge etgtggeagg cetaggacet eaggegggga
                                                                    2760
ggaggagctg ccgcaaggcc ctgtcccagc agaagaggga ggcttcctga ctgacacagg
                                                                    2820
ccagccccat cttggtcctg tcaccctggc cccaactatt aaagtgccat ttcctgtctg
                                                                    2880
gaaaaaaaa a
                                                                    2891
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (6) ... (892)
     <223> similar to gi4102715 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3500
gggttaggag aaagagacag gtgtatggca ccgacagcag gttcagcatc ttggacaaaa
                                                                       60
ggttcttaac caatttccct ttcagcacag ctgtgaagct ttccacgggc tgtagtggca
                                                                      120
ttctcatttc ccctcagcat gttctaactg ctgcccactg tgttcatgat ggaaaggact
                                                                      180
atgtcaaagg gagtaaaaag ctaagggtag ggttgttgaa gatgaggaat aaaagtggag
                                                                      240
gcaagaaacg tcgaggttct aagaggagca ggagagaagc tagtggtggt gaccaaagag
                                                                      300
agggtaccag agagcatctg caggagagag cgaagggtgg gagaagaaga aaaaaatctg
                                                                      360
gccggggtca gaggattgcc cgaagggagg ccttcctttc agtggacccg ggtcaagaat
                                                                      420
acccacattc cgaagggctg ggcacgagga ggcatggggg acgctacctt ggactatgac
                                                                      480
tatgctcttc tggagctgaa gcgtgctcac aaaaagaaat acatggaact tggaatcagc
                                                                      540
ccaacgatca agaaaatgcc tggtggaatg atccacttct caggatttga taacgatagg
                                                                      600
gctgatcagt tggtctatcg gttttgcagt gtgtccgacq aatccaatga tctcctttac
                                                                      660
caatactgcg atgctgagtc gggctccacc ggttcggggg tctatctgcg tctgaaagat
                                                                      720
ccagacaaaa agaattggaa gcgcaaaatc attgcggtct actcagggca ccagtgggtg
                                                                      780
gatgtccacg gggttcagaa ggactacaac gttgctgttc gcatcactcc cctaaaatac
                                                                      840
gcccagattt gcctctggat tcacgggaac gatgccaatt gtgcttacgg ctaacagaga
                                                                      900
cctgaaacag ggcggtgtat catctaaatc acaqaqaaaa ccaqctcttc ttaccgtagt
                                                                      960
qaqatcactt cataqgttat qcctggactt gaactctgtc aatagcattt caacattttt
                                                                     1020
caaaatcagg agattttcgt ccatttaaaa aatgtatagg tg
                                                                     1062
```

<210> 3501 <211> 1873

<210> 3500 <211> 1062 <212> DNA

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1789)...(395)
<223> similar to gi2662167 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3501
tttttttttt ttcaccagtt ttagcatgca actttattaa caacatgtaa ataaaatctc
                                                                       60
aaaagaatac acatatcaat ataaagcaca gaagtatagc ttactcagga tgaatagatt
                                                                      120
cattatcagg tcacgttgca aaaataccta aaatatctca atttatatac tatatagcac
                                                                      180
aataaaaatc agcacatgtt caggatctca agattaattg gtatccataa aatggcctcc
                                                                      240
ctcaatcaac atgggaaacc taaggattgg atttattaat taccaatatg cattggggtt
                                                                      300
ccatattgca actccccaaa actgtttgag gctttatgag aacagagggg tattcaqagt
                                                                      360
tttagtaata aaccggagga cttaatctct cacttcggga tcactgtgct ctgctaagtc
                                                                      420
ttggagtttc tgaccaaact gttttgcttc ctggaatatt gaaataagct cagatttagt
                                                                      480
gaacttttcc ttggtaaata gctttgcctt tgttttgaac tgaaaattta tattctcaaa
                                                                      540
tatttcaata atattaagaa tattggcctt tgactcattc ttgttaaagg gtgcaaccaa
                                                                      600
tgatgacagt actttggcac tgatcaattc tcttgtattg gcgtgatttt tagacaaaca
                                                                      660
cgaaaacact tttaaaacat aaaacttggt tttgacactt cccttgttta acaaggtgag
                                                                      720
gaaatctgga atataactgg taatcacata gtgatcttca aattttatac tcaagtgccc
                                                                      780
taqtaatttc agtccagcca gctgcacagg ggagttcaag gggcaagaga ttatgccttt
                                                                      840
acaaacttga tgtatatatg actcccctga ttttggttct tcggaagact cagagctgtc
                                                                      900
atccaccata cttaaagctc cagggtgttc tttaacattg ggattattga ccaagttttc
                                                                      960
aatcataaca gtaataccta catcatgaat tatatcttga gtaaatggat aagcaggact
                                                                     1020
gatgcccatt atcattgtag ctatttcatg aatgaaagga tccttagtta acttaaggag
                                                                     1080
ggcaacaagt ttatcaaact ctttaggctc taaactaaag ccacgtgatt tgcagtggca
                                                                     1140
ggccttcgga ttaggcccat acttttccct ttgcctaatc tgttttttqa tctcaqctaa
                                                                     1200
ggtctggtaa taaggcccat gataaggtgg gatcttggtc aaaggtcgaa tccccagagg
                                                                     1260
agtttcaatc aaggtctcaa ccagggtcca gtttccttct ggaggcaagg attgctcccc
                                                                     1320
tccttcaact ggaactagga caatatacct ggcccttgac catgctatta ccttttgttt
                                                                     1380
tatagtaagt gtgggtttgt gtgtgggctt gggcttttcc tggatcttag gtaggggctt
                                                                     1440
ataaacttga agagaggtct cttcttcagg ccagaaccag qaccctacac taggctcttc
                                                                     1500
tccagtccag aaccaggagc atatatttc ttcatcctca tcactggatt tcatcccaat
                                                                     1560
gctggtctct tcccttctgt caggtctgga cccagtattg gccttatcat gtgacttggc
                                                                     1620
ataggaccta atatttgcct caatgacagc aacaaccttg acttcagact tggttacagt
                                                                     1680
actgacceta gacataggea tggeetttga ettggtttgt ggeactatae tgegttetge
                                                                     1740
caggggtttt gtcttagtct caaccatgac tctagtctta gttgtatctt ccaccttgat
                                                                     1800
cacttccctt gtcacagcca tagcctccct gtaggtcact gtatgtgtcc tggtcattgc
                                                                     1860
tccatcacca gct
                                                                     1873
```

```
<210> 3502
<211> 2515
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (31)...(1190) <223> similar to gi3170538 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3502 ttttgaccgc gctggaggaa ctctgcacga gatgaaatcc tqctttcttt tcctcagaac 60 tactatattc agtggctaaa tggctccctg attcatggtt tgtggaatct tgcttccctt 120 ttttccaacc tttgtttatt tgtattgatg ccctttgcct ttttctttct ggaatcagaa 180 ggctttgctg gcctgaaaaa gggaatccga gcccgcattt tagagacttt gggcatgctt 240 cttcttcttg cgttactcat tcttgggata gtgtgggtag cttcaqcact cattqacaac 300 gatgccgcaa gcatggaatc tttatatgat ctctgggagt tctatctacc ctatttatat 360 tectgtatat cattgatggg atgtttgtta ettetettgt gtacaceagt tggeetttte 420 tegtatgtte acagtgatgg gteagttget agtgaageea acaattettg aagaeetgga 480 tgaacaaatt tatatcatta ccttagagga agaagcactc cagagaccga ctaaatgggc 540 tgtcttcatc cggtggaata caacataatg gagttggaac aagaacttga aaatgtaaag 600 acticttaaga caaaattaga qaqqiqaaaa aaqqitticaq catqqqaaaq aaatttqqtq 660 tatcccgctg ttatggttct ccttcttatt gagacatcca tctcggtcct cttggtggct 720 tgtaatattc tttgcctatt ggttgatgaa acagcaatgc caaaaggaac aagggggcct 780 ggaataggaa atgcctctct ttctacgttt ggttttgtgg gagctgcgct tgaaatcatt 840 ttgattttct atcttatggt gtcctctgtt gtcqqcttct ataqccttcq attttttqqa 900 aactttactc ccaagaaaga tgacacaact atgacaaaga tcattggaaa ttgtgtgtcc 960 atcttggttt tgagctctgc tctgcctgtg atgtcgagaa cactgggaat cactagattt 1020 gatctacttg gcgactttgg aaggtttaat tggctgggaa atttctatat tgtattatcc 1080 tacaatttgc tttttgctat tgtgacaaca ttgtgtctgg tccgaaaatt cacctctgca 1140 gttcgagaag aacttttcaa ggccctaggg cttcataaac ttcacttacc aaatacttca 1200 agggattcag aaacagccaa gccttctgta aatgggcatc agaaagcact gtgagacgca 1260 cagacggcgt cttctgccac caagagaccc gagaactcca gattcacgac attcctqtcc 1320 catgtagaag catttccatt caaccgtggc ccctcttcag aacctagacc tatcagtgcc 1380 atttttttt cataatctac gaagaacttg gctatggctg atcttttta aatttaactt 1440 tctgatggac cctgtagttt ccagctaagt gcatattcct tacagacata tagaacagcg 1500 cattettetg tagacatttg etcatgttgg taaatacaat cacceatatg aaaaaattgt 1560 tttcacctga tatgaaaatg ttagaaaagg caaactccgg gacttctaaa gatttactta 1620 aatcccatta tgtactttat tcagaatgta gaagctgact tgaaaggcat ccttggtact 1680 aagtgaaget tatteagaaa atgeattttt caaatgeaat gggeaactge ttgtagatat 1740 catttttgca gtgtatgttg gagctgtaat ggttgcaatt atgtttctta tttccttaaa 1800 agcaaaaagc gtagtttctg atttatgtta tagaatgata ctgattagac tttgagccaa 1860 ggggaaaata ctaaattett ttaaaeeetgg ageettagag ageeaeagga atatettetg 1920 ttgtacagtc taataagctg tggtaggaag tatcatgtaa tcacagttta atgacagttt 1980 atgtatatat ataattcagt attccctctg ataacatagt tgccagtgtt taatacactt 2040 gtaacttgga tttttacctt ataggctata tgtatactca gttttttaaa gcattttttt 2100 cagagatcac ttaattcccc atgcttctgc aatgcatata aaaactataa atgccqaqtq 2160 gtagaaactc ctetttette atagteetea ggetttggtt acatttgeat atgecatttg 2220 aagcctccag cttttaccag tttaacatcc aaagttcaca gcatcagcat tcatggtgta 2280 agaacagttt tgcagtataa cacgatctga taatcattca qttattaaat tgtaaataat 2340 tattgggatg gtttcttggc tttaagtcca ctgaataaaa actatgaaat tgcactctgt 2400 gtcaaccatc cactagggta ggataccgaa atctgtggca tgcaaaaata gggagatggg 2460 gcccatttgg cacacaattt cgtagttatg cagtctgcca ttttaatttg ttcac 2515

<210> 3503 <211> 1087

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1088)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (1089)...(518)
     <223> similar to gi3212996 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3503
ttttttttt ttcactacaa agtcctttat taacaagtca ataaaaacag aagagagaga
                                                                       60
gatqtcaaaa tactttcctt ggaggcccca ggagggagag gcactgtcag gactcacctg
                                                                      120
gccagggaag gcaaccccac cagaggcaga acggaggtca ggggggcagc tggcccagga
                                                                      180
agcctttggg gaatggctca ggcctcaggc agggactgtg caaacgccga ggctgcgcag
                                                                      240
ggagtgatgg gttgggggct taagccccga gcaccgtgtt cccctgcatg ggcagacacg
                                                                      300
cagtcaggct agcacctgcc cactccacct gtgagtgtac acaggtgtcc gcgtaaaagc
                                                                      360
cggtgcctgc acgcagctta catacagaga gcggaacgag ggtccccagc agaacagggg
                                                                      420
gctcgttcca gagcttaagg aaatagctta gagaagtctt tggaagcctg ggtcgagggg
                                                                      480
agagcaggga ggctgctctg ttgcccatgg gcctcaggaa gccaggcctt cctgccgccg
                                                                      540
ctggaggacc tcgatgacgc tgccgatacc gtcctcgggc accagggcgt ggtcgaagtt
                                                                      600
gaaggtgctg atgtagtagg cagagatgtc agcggcagcc aggggacctg caatctgtgc
                                                                      660
cacgatgcca cattcatcaa agcccagggg ctgtccaccg atgcgcacca tcctccacag
                                                                      720
ctcccccgag gagctggtca gcaggaggtc actggggaac tttttctgtg tttcagcatc
                                                                      780
catgacaatg gaagatataa ccctcgatga gggagaaggc aaagaacgtg atggagctgg
                                                                      840
gttcaggact gctagaggct gcctccttgg gggtgctgtg cgagtagaag aggacatcta
                                                                      900
tgagggtggt ggcgatggct ggaagcgtct cagggtccag tgtgaggaca cagaagcggt
                                                                      960
tctgtgggct ctggatggga tgcaccgtgg ggctgggccc atgctgagtg cggggaaagc
                                                                     1020
cattgctgga atcatccctc gtcacaggca cnagctctcc gcccactcgc ggtaaatgtc
                                                                     1080
gaactcc
                                                                     1087
    <210> 3504
    <211> 654
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (652)...(242)
    <223> similar to gi1573605 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
```

<400> 3504

```
ttttttttt ttggcttgag actgaacgtt tttccatcat tttacaaatc agggatactc
                                                                       60
gtcccaattg gcagggccca ccccaagact gccggcccct agagccctgg ccagggccca
                                                                      120
ggtctgggag ctgccactgg gaggcctgtt gtgagtggtg gtactggagc tcagggtgcc
                                                                      180
cccagttcct cttccggccc aggtggtctt caccaggcct acagcagggg gttgagggca
                                                                      240
agcacccct tcctgaggat gaggtttccg tagagggccg tctcccccgt tgccacaaca
                                                                      300
gcaaaagcct tcttagcccg ttcataaaac tcaaacctct ctatctttgc cagggctctc
                                                                      360
acacagoogg cootgogtag gatggactog tactoogtoc acactggggt otgcaggood
                                                                      420
ctctccttgt cgctgggcac cagctccatg actgcagccg gactctccac ataggtgtcc
                                                                      480
aggggcagca gcttcagcac ggcctccagg agctgcqqga tgccacaggc cqtctqcacc
                                                                      540
gatctccatg ggcccacaac tggcagatgg aggaggcccg ggaagttcaa gtccgaaagg
                                                                      600
aacgatctcg tccccgtgcc ccatccgcgc ccagcgcgaa agcaatttqq qqqq
                                                                      654
```

```
<210> 3505
<211> 2028
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2029)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (9)...(1045)
<223> similar to gi2764994 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters

<400> 3505
cagagat ttccttagga gcaatttgtg cagtgttgct ggttattatag gggctatttg
```

ggcacgagat ttccttagga gcaatttgtg cagtgttgct ggttattatg gggctatttg 60 caactaggtg taaccgcgag aagaaagaca ctagatccta taactgcagg gtggccgaat 120 caacttacca gcaccacca aaaaggccat cccggcagat tcacaaaggg gacatcacat 180 tggtgcctac cataaatggc actctgccca tcagatctca tcacagatcg tctccatctt 240 catctcctac cttagaaaga gggcagatgg gcagccggca gagtcacaac agtcaccagt 300 cactcaacag tttggtgaca atctcatcaa accacgtgcc agagaatttc tcattagaac 360 teacceaege caeteetget gttgageagg teteteaget tettteaatg etteaceagg 420 ggcaatatca gccaagacca agttttcgag gaaacaaata ttccaggagc tacagatatg 480 cccttcaaga catggacaaa tttagcttga aagacagtgg ccgtggtgac agtgaggcag 540 gagacagtga ttatgatttg gggcgagatt ctccaataga taggctgctg ggtgaaggat 600 teagegaeet gttteteaea gatggaagaa tteeageage tatgagaete tgeaeggagg 660 agtgcagggt cctgggacac tctgaccagt gctggatgcc accactgccc tcaccgtctt 720 ctgattatag gagtaacatg ttcattccag gggaagaatt cccaacgcaa ccccagcagc 780 agcatccaca tcagagtctt gaggatgacg ctcagcctgc agattccggt gaaaagaaga 840 agagtttttc cacctttgga aaggactccc caaacgatga ggacactggg ggataccagc 900 acatcatete tgetetegga aatgageagt gtgtteeage gtetettace geetteeetg 960 gacacctatt ctgaatgcag tgaggtggat cggtccaact ccctggagcg caggaaggga 1020 cccttgccag ccaaaactgt gggttaccca cagggggtag cggcatgggc agccagtacg 1080 cattttcaaa atcccaccac caactgtggg ccgccacttg gaactcactc cagtgtgcag 1140 ccttcttcaa aatggctgcc agccatggag gagatccctg aaaattatga ggaagatgat 1200 tttgacaatg tgctcaacca cctcaatgat gggaaacacg aactcatgga tgccagtgaa 1260

<210> 3506 <211> 1151

```
ctggtggcag agattaacaa actgcttcaa gatgtccgcc agagctagga gattttagcg
                                                                     1320
aagcattttt gtttccatgt atatggaaat agggaacaac aacaacaaca aaaaaccctg
                                                                     1380
aaagaactgg cattgccaaa tagttgcatt tatcataaat qtqtctqtqt atattgaata
                                                                     1440
ttaaatactg tattttcgta tgtacacaat gcaagtgtga ttattttaat ctgtatttta
                                                                     1500
aaaatacatt tgtaccttat atttatgtgt aatttaacaa acaaatttta tttttttact
                                                                     1560
cccatgacag acatgttttt cctagtcqtq taqaaactaq ccactgttca aatctgatac
                                                                     1620
actattcaac cacaaagtgt aaaggcactg cttagattag ttttgttggg gaagaattat
                                                                     1680
tatgttgtat ggacaacccc actgaagcat ttatacaatt cttaattcca ttaagtgatc
                                                                     1740
ccactttttt tcaataactt tttagaaatt aaggaatcat taaaattgtt aaggctattt
                                                                     1800
tattgttatt ttctctactt tctactagcc ccaatagttg gaactcttat aggggaaaat
                                                                     1860
cggaaagata aagtggaaag gtttatttca ggactgagga aatatcttga aggttattta
                                                                     1920
ttaggatgga ctatctccaa atggaacttt tttattagga cantgatgga aaacaggaac
                                                                     1980
caaaagtcca atgtttncct gactcccagg gcccctacta tttccagg
                                                                     2028
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (824)...(170)
     <223> similar to gi3878737 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3506
ttttttttt ttgaagatcg cacactttat tttgaaaacc aggccaggga cagctccagt
                                                                       60
ttggggggag gggaagagat tataactttt aaatctacta cgaaaataca aaaagaggaa
                                                                      120
tgtgacaggg ttccttcctg tgttatgtca ccgtctgtaa tcagatccca cagtccagcc
                                                                      180
cagaatcata attcacataa cagcgaaact catttgccaa gttccgggtg tgtcttggga
                                                                      240
acaaacgtgc acatetteae tecaaggagt tetgetgeet gttetteeat gatggeaeet
                                                                      300
gtgccacage agaatettge eccgegteag gtaettgaeg gttteegatg tttttetgag
                                                                      360
acattcctcc gaaagatagg gaggatctgc tattacgatg tcaaaactat gtgcagcaat
                                                                      420
tctttcgggt aagtccaatg gattattgta atcatagaaa ataaactcct ctccatacat
                                                                      480
ggcaaatctt ttgtcatatt caaagatgta tatcgaaaag ttttctctgc acagctctct
                                                                      540
gagtttctgg taaacactag gggcactcac acatgcgatt ctgccacctt ctcctacagc
                                                                      600
tgcaattgcc tcctgtgcca gctgcagagc agtttcctga ctataccaaa actggctcag
                                                                      660
ttgccaattc tcttctatta ttccaatgtt atatttatca tcctcgcctg gctcaatttg
                                                                      720
ttgcttttgc tcagcataaa attcctggag agctgctaag gcatgggcag aaagctgggg
                                                                      780
tgtctcatca tcttccaaat cactcatttc acaagttgtt tataacccag qtgtqqtqqc
                                                                      840
aggcacctat agcgccagct actcaggagg ctgagacagg agaatcgctt gaacccagga
                                                                      900
gatggaggtt gcagtcagct gagatctcgc cattgcactc cagcctgaat gacaggagtg
                                                                      960
agacageege gegtgegeae ceaegegtee geggaegegt gggetggeet ceqttgeaae
                                                                     1020
tgttttgacc tagtgaaggc ctagactttc tcagacagat ttcttttaac tcttctgccc
                                                                     1080
tgactccagt cttcactggg atgctgcctt gcacttgagg aatgtgaacc ttccctaagc
                                                                     1140
ggacgcgtgg g
                                                                     1151
```

```
<210> 3507

<211> 2249

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1319)

<223> similar to gi5262640 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 3507 cccagcgccc cggaagtgat ctgtggcggc tgctgcagag ccgccaggag gagggtggat 60 ctccccagag caaagcgtcg gagtcctcct cctccttctc ctcctcctcc tcctcctc 120 ccagccgccc aggctccccc gccacccgtc agactcctcc ttcgaccgct cccggcgcgq 180 ggccttccag gcgacaagga ccgagtaccc tccggccgga gccacgcagc cgcggcttcc 240 ggagccctcg gggcggcgga ctggctcgcg gtgcaggtaa agctccagat ggctctggaa 300 cttatgagga aagagttgga ggacgccttg actcaggagg ccaacgtggg gaaaaagact 360 gtcatttgga aggagaaagt ggaaatgcag aggcagcgct tcagattgga gtttgagaag 420 catcgtggct ttctggccca ggaggagcaa cggcagctga ggcqqctgqa qqcqqaqqaq 480 cgagcgacgc tgcagagact gcgggagagc aagagccggc tggtccagca gagcaaggcc 540 ctgaaggagc tggcggatga gctgcaggag aggtgccagc gcccggccct gggtctgctg 600 gagggtgtga gaggagtcct gagcagaagt aaggctgtca caaggctgga agcagagaac 660 atccccatgg aactgaagac agcatgctgc atccctggga ggagggagct cttaaggaag 720 ttccaagtgg atgtaaaget ggatecegee aeggegeaee egagtetget ettgaeegee 780 gacctgcgca gtgtgcagga tggagaacca tggagggatg tccccaacaa ccctgagcga 840 tttgacacat ggccctgcat cctgggtttg cagagettet catcagggag gcattactgg 900 gaggttctgg tgggagaagg agcagagtgg ggtttagggg tctgtcaaga cacactgcca 960 agaaaggggg aaaccacgcc atctcctgag aatggggtct gggccctgtg gctgctgaaa 1020 gggaatgagt acatggtcct tgcctcccca tcagtgcctc ttctccaact ggaaagtcct 1080 cgctgcattg ggattttctt ggactatgaa gccggtgaaa tttcattcta caatgtcaca 1140 gatggatctt atatctacac attcaaccaa ctcttctctg gtcttcttcg gccttacttt 1200 ttcatctgtg atgcaactcc tcttatcttg ccacccacga caatagcagg qtcaggaaat 1260 tggggcatcc aggggatcat ttagatcctg cttctgatgt aagagatgat catctctaaa 1320 attotgttoc caagatgoag tootagogta gogaaogtto otggagtggg gtgaaggata 1380 tcaatatact aagttttaac cagatacccc atttaggtca gcacttgatt cgttgttgct 1440 gtgaaatatg tccatgggac aaaagaggga atatgaaata tttgcatatg ggaagattat 1500 agagcataat aattttgtaa atggagcaat ctcaacctct atttctagat cacattttct 1560 tgatgtcttc cttcaaatta atgaccttgg attacataag gatttctatg cattcattat 1620 aatttgttat tcctttcaat atccttgtat ttcaaatctt ccatataaga attagacatg 1680 gcaattetta aattgattea gaatggtetg atactattee agtateacet cettaattet 1740 gtttctcctc gttttcctga ttttccttct cattctctcc ttccccgctc tgtctctctc 1800 teeetgteae tetetetete tegtteetta ttttttgttt ettaeetett aetgtttaae 1860 ctgttgcttc cttctggatt aatacattta gagccattcc tttatatggt cacatttcct 1920 atgactttac tcaattactt ttaaaatcct ttctattctg agactaattt ttaagaatta 1980 caaagctcat tcttctgaat ctaatatcac taactcctag actttttccg ttttctttgg 2040 atacacttta agtaggaatt tatcagaatt ttcattcaac tcgttcttta atgcagatat 2100 ttactagtta taagacetta aggetgggtg cagtggetea egeetgtaat eecageaett 2160 tgggaggctg aggcgggtgg atcacaagct caggagttca agaccagcct ggccaacatg 2220 gtgaaaccct gtctctacta aaaaaaaa 2249

```
<210> 3508
<211> 2128
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2129)...(847)
<223> similar to gi4929567 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3508 tttttttttt ttatgtatat acgtgtttat tatatgctta ttacaaaaga aaaagtcttt 60 tgccttattt tagggcttcc atgtaaaacc tagttaaaat acaaaaagta aattagagaa 120 aaattctgct taggtagtga aaattgatag caacttataa gctgtatcct taaaaaccta 180 gtcacagata tagaattacg taaagataaa atgataagcc tacttattgg caagaaacag 240 gttaggccac ttaagcagca tgtttctacc actatacaaa tacatcggca ggtccaaaca 300 ttaaaccacc attcgattga caacctttta tttttcaact taggtaacag tccaaaatca 360 gtgtagattg gcgaaaaact aggcaaaaat agcaaaaagt gcaqtttaat ttagcaaagg 420 ctcaagacag tatgtggaag gaaggtgaga tttccctcct actgcggcaa ggcaagcggc 480 agttactgcc cgacagtaac gatggtgtgc gcacccccga tgagaatgct gctgcaacac 540 agactgggac gccgcctccc ccattagacc tgccagctca ttcgtgaaaa tctaccagga 600 acacatcaat gaaaaaaata tgtcaaatat gagttctctg ttataagcaa taaaatcaca 660 aaatcaactc agatttgaaa tttagggtaa gctaggacaa tttcctactt tttaatatat 720 agatatttta gatttgacaa tcgtttccac atacactcag acaggcttac agaagaattt 780 caaatatcaa atagagaagc tgttaattca cgcacgttat gacttcagtt aattcttcca 840 gtgtttagac ttcagagctg ctaataacac taaactcaat accgtgtttg ttgagtctgt 900 caatcaactt tgttttggaa aaagctgctc caggtgtgaa gaccccgccc gccttaggca 960 gatgagaagc atcacttaga agagtcatgg ctgcctgaac catagctatg ggggtagcca 1020 catagccagc ctctggtcct ttcacctgag tacaaatttt gatatttggt ttgttcttat 1080 ctgtaccagt gccttggctg tatccttgac caaagaatgt cagcgtgaat gaggcagcat 1140 caatctgttt ttgtgttggg ccttgttttg aaaaatagcc aaaggagaag aaccatggga 1200 attttatgag aagttgcctt ccaattccaa acctcacaaa gaacaaaaag aaaagtcctg 1260 caaacatcag cttaataaca gaggtgatgc ctcccacagt tacatacgca gcatactgaa 1320 ctggtgattc ctctaaattt tcatacaagt aacgttgagt cctccttaca acagacacat 1380 cagatcccat aaaaggaatg gaataacctt tgagttcccg acaataagaa attggccacc 1440 ttctcttcaa ttttggacca atgagcggga caggtttcag atttgataca tttcttagtt 1500 ttctcaaatt actctgatct ccaaaaccat aaattgctga cttccaggta ccatcatgaa 1560 tgctcaaccc ctcaggtcct gaatgtatag tcaggaaact ttccacagca gtcaaagtac 1620 cattcatttt atttctggta tatattactc ccagatctgc tggaatggag tcaaagccgc 1680 tgcttccaat gatataaacc cctttgtctg cagctttctc atgatacttc agttgcatta 1740 gttccagaaa ctgaggttct ccactgatgt cgatacaact ggctccattt tcaatacatg 1800 cttttattac aggttctcca taaaaccgat atggtcctac gcaattgagg acaactgttg 1860 cctgtttagc catttcatca agcgaggctg gattagcaat atcacagatg atgattccaa 1920 cttcagatga cagtgttggt cttcccagct tcagggccgc cttctccagc acccgctgca 1980 getteteceg ggageggeee gecaeggeee agggeaggeg ggageteege teegggteea 2040 cctgctcccg ggccacctcc tcggtcacga actggccggt gaagccagac gcgccgaaca 2100 ccaccaggtg gaaaggcctc tgctcggt 2128

```
<210> 3509
<211> 1521
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1448)...(888)
<223> similar to gi1669601 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3509 ctcataaaag tgacttccct tctctcagct tcattttcct tatacgtaga aacaagaaca 60 agcaatacat acctcaagaa gacattgaaa ggactcaatt acttaataag acaacttaac 120 atagcgctag caaataataa cattccttag ttctctttcc ttctactacc cttacagtgt 180 gtagaagacc atagctgcaa aatgcaggct tgataacttg agcaactgat acatttctct 240 gattttgttt aattatata ataaaggtaa gaggcctttt cacaggtatt aattaagttt 300 aaaaataacc gccatccaac acaaaatagt atttcttgtt atatttcata aacagtctaa 360 caaaacacta acaaagttat tttgcttatt attctgatgc tggaataatt tggtcaaata 420 ttcataaata gttatcaact ttaccaaggc acaaaaatca agaatacatg ctttctataa 480 actcatttac tactttaaag tttttaactg tttagcagtt ataggaaatt tttttaatcg 540 aaaagaaacc tatttacatt tcaaatacaa aagaaaatta aaattattct tgattgatct 600 ctaaaaccca accacttaga tgctcattat tattattttc tttcaccaat ccagtatact 660 ctattcaaca tgtgcatcct gtgtacttac taagcattta tttgcacaag gattttctgt 720 gtcaggttaa ctttgctgtg tagattctgt gtagctacct gaattcgtcc aagaaaagt 780 ctcacatttt ttggaaaacc aatgctgcta cactgtttcc agatctgcct ccaaagctga 840 acttgggtgt tggtagctct tcgagaagtt caaatccttc actgaattca tttagcaact 900 cttccttggt ccaattacat gacgttatta gaaaaaaagc cttttacttt caacaccttg 960 gagagagatt tcacatattg cttcctcttc tcaattgcat tgtcaggatt aaggcttatg 1020 gcatcaaaag tccctttgtc aatacaaata tgaaatccag acagctgtgt ggagagattc 1080 aaaaagtctt ctacctttaa cttaatgtta gataaacctt ctttttctat aatacttcca 1140 gaaagctgaa ttgcagaagg agagtaatca attccagtaa tattagagaa accaaatttt 1200 gcaagttcaa ccaggaaaac accatttcca gttccaatat caagcactga agcatccagt 1260 ggaatcttgt gtttctgcat ccaccttatt agtcgattca tactctcttc tccaaaccaq 1320 atttcacctg tatctccata ttctcggaaa gtttgcagtt ctctctcata gacagcatcc 1380 caatgctcgc gggtccccag cgccgacggg acgaaaccgt cctccccggg actgcccttg 1440 teegacegeg eegeeacege agegeeaceg eegeegteag egeeegaget catttegete 1500 cacqtcctqq acqqccqttq q 1521

```
<210> 3510
<211> 1929
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1932)...(276)
<223> similar to gi1354050 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3510
ttttttttt ttacagatca caggaatttt aaattgcaga tcagtcatgc tacttggggt
                                                                       60
gatcagaaag acttgaacac ttaccaagtg aataatttta ttaaggtcct gaaggtgagt
                                                                      120
gtccggaggt gctgggtaaa acacatcaca ggtaagaaat gggaaaccta cctcagcatt
                                                                      180
tctgaaaggc acaatctatg gaagggaaac ctagcgtaat aaaaccctca ctggatgtac
                                                                      240
atggaaagga gtatggtgag ctatttcctt tttaaaggat gagaccttca taaattggcc
                                                                      300
cctcggattc tggtgattcc cgccgcaagc gcaaatgctc cagtgtgtta tgaaaatgtt
                                                                      360
tgttaatctg ctctgtttct tcactggatt caagattcgg gaggtcttct cgaatctttt
                                                                      420
ggataagctg gtttaaaacc tgaattgtta ccgcatcatt ttccttttca taaaaataga
                                                                      480
tatatetgtt cagaatttet ataaaaaget geaettgtag agaggggtee atgeaetgat
                                                                      540
ttgctatttt tagagctttt tttaggcact ccattaccct cttgcctccg tgaagctcct
                                                                      600
ccccattttt gtccgtgttt ctgccagacc agaagagatg tgcacaggtg ctcacagctc
                                                                      660
ggccctgatc aggtttcttt agaagtttgg atgcagcaag ggcacactga gtcctcagag
                                                                      720
gttcatgatt ctcttcactg aagcacttca tcctttcaaa agtgccaatg atcaaggtga
                                                                      780
tggcagctag ctgtgctttg gaatcgctga tttcatcttc atacagagaa aatgcctggg
                                                                      840
acatgaattc atatgcgact gtctcatgat tttcaaaacc aatttcccca gcagctagtg
                                                                      900
ctccttgaag aaaaagtctt aagggcaatt ctgccagctc tgctttgatc aaagcactga
                                                                      960
tagtctggtg ggcaaatgaa aaaatcttct ggcatttctt ttcccatttg tcatccactt
                                                                     1020
tagaattctc tttatatcga aaagccagct ggtaagctgc aaataccaaa ggtggcagtg
                                                                     1080
tgaagcgaat ccgctgattt ccaccagctc caaaatgttt tcgtgctgtg ttcaaaatca
                                                                     1140
agtactgctg gtcagggtcc tcagagcgca gcagatgaat gaagcggccc acaaggctct
                                                                     1200
gctcatcagc aaaatcttct ggatcagggt cttctacagg ttgatctggc tgatcttgaa
                                                                     1260
tcaacgtgga taccaaattc attatggaat ccacctggtc ttgagagaca atttctgtgt
                                                                     1320
tataatccag aacattacta agcacataac aactcatgct ctttctggac tcgtagtcaa
                                                                     1380
agtactcaaa gagtgggtga aaatgtttta atttcaagac tgttaaaata ttgttgtaag
                                                                     1440
tgtcaactgg tattttcaaa agtctggtga gttcctttga aactgcacta ctggtagcaa
                                                                     1500
tatgttcaag gttgagctta ttgaatatct ccactgttgt ttctagaact ttatcaacat
                                                                     1560
agtccacacg atcagggtaa catttcatgg caagattaat cagagagact tgtaaagata
                                                                     1620
caacatcctc tgaaggcatg tcttgtctag actgtatcac tgtagccacc tgctgtgaaa
                                                                     1680
atatatcaaa aagtttaata toogotggga ttooaggtoo atottoacgg tgagcaaata
                                                                     1740
aagctaatct atcaattaaa gcaatgatta tgttcttcac atttacattc tggtgtaact
                                                                     1800
cagcacaggc ccgaagaaaa ggattcaaag tctggaggtg aaattcatca gggaaaacct
                                                                     1860
gaataataca ctccatgaga tattcttgag ccaaagcatc cctacagttt acaacttgct
                                                                     1920
ccaatatgc
                                                                     1929
```

```
<210> 3511
<211> 858
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (859)...(104)
<223> similar to gil654000 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3511
ttttttttt ttggacttag caaggtttat ttggaagggc agagtccaac caaccccagg
                                                                       60
tcctgagggt agactcaggt cctgagggaa aggggtggac ttcagtgggc tttcttgctg
                                                                      120
tgttgggtgc tcttggggaa aggctgcggg cccagccaga gctgcagcag gatgacggca
                                                                      180
tggcatatgt gcagggcagc agagctgcag gatgtggaag ggtatgtgtt ccaggagagc
                                                                      240
tegatgagee ecageaceaa caacetgage aggtgtgtga gecagegtge aggeatggee
                                                                      300
cacaggaggt agggcagtgt gtggaaatac cagacgtaga actggtagtg gagggagcgg
                                                                      360
ctgaagcaga tgccaatgaa gttggaggtg aagagggtag aaacgatctg gttgggtgta
                                                                      420
aggggctggg gtggaacctt ccttttggag ggatccctca gcagcgacaa gatactttcc
                                                                      480
cctgtcctgt gccacctgca gagggcaaac agcaggagca gggtgaggtg ggcagtcaac
                                                                      540
agggccaggt ggaaggctcg atgcaggaag agcgcctctg ggaggaagcg ccaqttcact
                                                                      600
gtccagtgga acagaaactg gcggccaagg tcaaaggagc gggacaggta gccgctgggg
                                                                      660
ttctccagca ggaagggcag ccccagcacc acctgaaggc cagcacagat tcccagcttg
                                                                      720
gggagggccc cacggaagcc aaactgtgtg aggagaagaa acagtaaccc aggggcgaag
                                                                      780
agcagcacat tcatcttcac agagactgcc aggctgaaaa agcagcaagc cccagcccca
                                                                      840
gcgctgggcc agcaggag
                                                                      858
     <210> 3512
     <211> 2613
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2)...(2167)
     <223> similar to gi4768829 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3512
agaattgatc acttctctgc ttcacagtgg agctgatata cagcaggttg gatacggtgg
                                                                       60
cctcactgcc ctccatattg ctacaatagc tggccaccta gaggctgctg atgtgctgtt
                                                                      120
gcaacatgga gctaatgtca atattcaaga tgcagttttt ttcactccat tgcattttgc
                                                                      180
agcgtactat ggacatgaac aggtaactcg ccttcttttg aaatttggtg ctgatgtaaa
                                                                      240
tgtaagtggt gaagttggag atagacccct ccacctagca tctgcaaaag gattcttgaa
                                                                      300
tattgcaaaa ctcttgatgg aagaaggcag caaagcagat gtgaatgctc aagataatga
                                                                      360
agaccatgtc ccactccatt tctgttctcg atttggacac catqatatag ttaagtatct
                                                                      420
gctgcaaagt gatttggaag ttcaacctca tgttgttaat atctatggag atacccctt
                                                                      480
acacctggca tgctacaatg gcaaatttga agttgccaag gaaatcatcc aaatatcagg
                                                                      540
aacagaaagt ctgactaagg aaaacatctt cagtgaaaca gcttttcata gtgcttgtac
                                                                      600
ctatggcaag agcattgacc tagtcaaatt tcttcttgat cagaatgtca taaacatcaa
                                                                      660
ccaccaagga agggatgggc acactggatt acactctgct tgctaccacg gtcacattcg
                                                                      720
cctggttcag ttcttactgg ataatggagc tgatatgaat ctagtggctt gtgatcccag
                                                                      780
caggtctagt ggtgaaaaag atgagcagac atgtttgatg tgggcttatg aaaaagggca
                                                                      840
```

900

960

1020

1080

1140

1200

1260

tgatgccatt gtcacactcc tgaagcatta taagagacca caagatgaat tgccctgtaa

tgaatattet cageetggag gagatggete etatgtgtet gttecateae eettggggaa

gattaaaagc atgacaaaag agaaggcaga tattctcctc ctaagagctg gattgccttc

acatttccat cttcagctct cagaaattga gttccatgag attattggct caggttcttt

tgggaaagta tataaaggac gatgcagaaa taaaatagtg gctataaaac gttatcgagc

caatacctac tgctccaagt cagatgtgga tatgttttgc cgagaggtgt ccattctctg

ccaagctcaa tcatccctgc gtaatccagt ttgtgggtgc ttgcttgaat gatccccagc

<210> 3513

```
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cagaagagga ttcttgattt gcagtctaaa ttaattattg cagtagatgt tgccaaaggc
                                                                    1380
atggagtacc ttcacaacct gacacagcca attatacatc gtgacttgaa cagtcacaat
                                                                    1440
attcttctct atgaggatgg gcatgctgtg gtggcagatt ttggagaatc aagatttcta
                                                                    1500
cagtctctgg atgaagacaa catgacaaaa caacctggga acctccgttg gatggctcct
                                                                    1560
gaggtgttca cgcagtgcac tcggtacacc atcaaaqcag atgtcttcag ctatgctctg
                                                                    1620
tgtctgtggg aaattctcac tggcgaaatt ccattcgctc atctcaagcc agcggctgcg
                                                                    1680
gcagcagaca tggcttacca ccacatcaga cctcccattq qctattccat tcccaaqccc
                                                                    1740
atatcatctc tgctgatacg agggtggaac gcatgtcctg aaggaagacc cgaattttct
                                                                    1800
gaagttgtca tgaagttaga agagtgtctc tgcaacattg agctgatgtc tcctgcatca
                                                                    1860
agtaacagca gtgggtctct ctcaccttct tcttcttctg attgcctggt gaaccgggga
                                                                    1920
ggacctggcc ggagtcatgt ggcagcatta agaagtcgtt tcgaattgga atatgctcta
                                                                    1980
aatgcaaggt cctatgctgc tttgtcccaa agtgctggac aatattcctc tcaaggtctg
                                                                    2040
tctttggagg agatgaaaag aagtcttcaa tacacaccca ttgacaaata tggctatgta
                                                                    2100
tccgatccca tgagctcaat gcattttcat tcttgccgaa atagtagcag ctttgaggac
                                                                    2160
agcagctgac agcattcggc gtatacctaa ggagagtttt ttccccgaac tgacagcaac
                                                                    2220
gattccaacc acggcaagct ggcttccaac tataacattt tactctcaaa ggtctcctta
                                                                    2280
aattgggctt gtttttactt gtcctattta attccccact attagcaggc tttggatttg
                                                                    2340
tgcctaagga ataatatgca aaagaaccaa gacagaatgt atatgaagaa ttgttttaa
                                                                    2400
ttttgtaaat taaaaaaaa tttagatcgt tacttggaaa tggagcctaa gtctgtggtg
                                                                    2460
gacagataat aattatgttt tcctgggctg aattatgtag acttgtgttt gacagctatg
                                                                    2520
ggtttatttc ttagaacatt gttcattttc ttttctcatt atgttacttc tagtgttcac
                                                                    2580
ctctgtgatt aaagattctt tggtgaaata gaa
                                                                    2613
```

```
<211> 5264
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (5265)...(155)
<223> similar to gi3015538 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
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cagccgctgg ctggaccagc acacgctgac ggggccggac tatttacagg cccattgcgg
                                                                     120
gctgtacctt ggccacctcc cggcacggtg ctcagctgtg acgccaaaat aagttagggc
                                                                     180
cggccgggcg gggcggggcg gggacggggg ctgtacacac aagtgctggg ggctcggggc
                                                                     240
ctcaatactg tcgagggccg gggctgtaaa catggccggg gcggccctgc ccacccctag
                                                                     300
tggtcggtaa cgaccggaag cagagcagcc gggcagggct gggaggctca ggcgtccgac
                                                                     360
aggcagetet ggateeggte cacceaetge tgggeegagg geaegteetg ggeaeagaag
                                                                     420
ttgtaaacgc gacgcgttgt cttcacgtca aagaaggcct tctcgtccac ggtcttaggg
                                                                     480
gcacccatag tgggcgtgcc aggtgccaca gcctccacct ccgccaagta gatgacaccc
                                                                     540
ttgcactctg tgtccacacg gtggtcgtag tagcgcagct ggtgcttggt cttgtccagc
                                                                     600
acgaaccage gggcetteca aggetteatg aaggeeect tettgtacag agtgeeeteg
                                                                     660
taggacctgt tctcactctc tgctgtctgg aactggctgt acagggtgct ggtgctgcgg
                                                                     720
cgggcagcct gacgggagcc ggatgtggtt gagccactac tctggtcgct gtccaggctg
                                                                     780
aggeteaggg tggageeeae gggeeeetee tgeaggtaea caeeeagega gegaeggtgg
                                                                     840
```

tggggtgcgg tggacacaag gagggagcta ggggtgccac ggccgtctgg ccggcctcg 900 aggcgctgtg cagccttcac ccggtcccag gtgtccttcc agcgctcagc gggttggccc 960 aactotgtot coagoototg cagotootoo agoaggogtg agatggogto aggotgggoo 1020 cgcgggcagc tgtcgtaaca gggccacacc acgcggcgcc tgctctgggg agcgcctcca 1080 tcagaccgtt cttcctctgg gggttcaggg ggcccctggg ccagttccca gtcataggga 1140 gggccctcgg ccagcgtctc ctcagtgtag aagtcccaca ccttcaggtt ggacacgttg 1200 ctgtagggcc gcaggacctc tgcgtcctcg ggcgcataca tgtaattgtg gaacacaggc 1260 gteetettge teageeggte cacatactee cacacagace tgeaeggeae etggeecetg 1320 cgttccccct tctcctcata cagcagcccc agctcaatgc gctcatagtc agagtcgagc 1380 aggaaggtcc ggaaacggcg ggacacatgg tggtagccga ggaacttgag gtagaactgg 1440 ctgaactcaa actccatggg gaactgcagg tggacctggt gtacgcagtc caggaactgc 1500 aggaagacgg gtgtgaagcc gctgctctgc ccggccaggg tgtgagctcc acggtggctg 1560 aagcgatggc cgaaggacag ccactcette tecaceagea ggegaaagee etecagegtg 1620 cggtagaagg ggtctgagag cagctgcacc aaggatacca cctgggtggt gatgtcccag 1680 ccatcctcca ggcccaccag cacggaggag cctgaatcca ggagctccac caccagcaca 1740 gacacctgca gcagcttgtg gatctggatc agccactctg agtcctccag tgagcgcagg 1800 aaggaggctg ggctgggctc agcagcgggg cagcctggga cacatgcttt cagcagtttc 1860 ttgaagctag ccttcacctg ccgtgcctcg aatacctcaa tgggcaccag ctcccactgc 1920 tgcagggggt ctgaccgcac accettgage tgggetttgt ccccaaggat atagaggget 1980 gctcgctgcg gacgcaggaa gcccgggtcg ggagggcccc cgttggcctg gggtggggcc 2040 agcgcgtctc tgccagctag ccgggagccc acatcggtgc caaggccact gctgcgtcca 2100 ctggtccgga cactgcccca cttaccgtga ctgcccatgt gggctgagga gaagccgcta 2160 agcgtgttgc gtcccgacgc gtcggcgtag cggggcatgg agctgaccac agcctgcagg 2220 tacttctcct gctccaggct actcgagtcc gcctgggact ggcctggaga aggtgcgttc 2280 tgggccttga agaggccgac gacacctttg ccatgcaggc ctccagagcg cagcagcacc 2340 gccttggacc gcccgctgcg ccagcagacc acggggaagc ggttctggcg atagcagcgg 2400 gacacgcgct gcagggcgtt gtcctggaca ctctggggca cgatcagcag ccctgggtag 2460 ctgcggcaga tggcatacat gcggttgacc ggagaaatgc ggaaggctca gacttggccc 2520 ggctcagget gctgctcagg gtgcccagac cgaggegetg gtagtcgega cagcaageee 2580 tttccaccag gctgctcatg gtcatgcggt cggagggctt cagggctgag gacggggtca 2640 gcgtgctggg ctccagctcc tccgacactg agatctcgtc ctcctggtcc tcaggggggg 2700 gctggccccg gtgctcccag ctgggggggt tgtacttctt gcgagtgaca tgctgccgcc 2760 cgatggtctt cttggcgttc ttgaccaggt tccgggacag ggttctgagg gaaggaccct 2820 tgtccttggt gactcgcggt ggccggccag gtgtgtgggc agagcccaag gtgaacgcaa 2880 aagttggcca tgattgttcc ggcgggtaac cgcagcttaa tgcagctgcc ttacggaaag 2940 agctcgggct ctgtcagacc ccacctcctc gtcaaaggcc attttcagca gctggaatgt 3000 gcaggagcgc agctggagcc cgtcctgcag gagctggtcc cacaggggtc tggaagctga 3060 tgcgcttctc cttggtcagc gcagccaccg ggaaggagcg gaccaccacc tgctcccaa 3120 ccagggggtc cgtgggcatc cccgtgaaga tgacccggta cgtggtgagg aagacggcgc 3180 cctcagctgg ggagcaattg tggtccccca gcactgcccc ccgcgccctc ctcacgccca 3240 teeggeagea ggtagaegeg eaggeegtee ageacaeact ceteaceegg eageaggege 3300 ggccgcagca gcttgggctt ctggatgggc ggcagcctcc ggctctcccg ctgcacggcc 3360 tccagggtct cgatgtgcat ctggacaatg tctggcacca tgacatgcag ccccttgagg 3420 tggtcgctgg tgaccccact ctccgtgcag accttgtcca caaagcggtt gatgaagcgg 3480 accacagece cagetaegte geaggtetet geateetega ageegetete egtgteatag 3540 ctctcggcca cactgccagc catgctgttg gtgaccaggc tgttgctggc gctctccagg 3600 tegeceagee eggeaegete eegaagtagg eggetettge tgetgteeag gggeaggagg 3660 aggtagetea tgeggttgge atagtggatg geetggetga acaeegtget etecteette 3720 tgcaccaget cetgetgett etcaegaete agagttggee acaagegeeg etgeteagaa 3780 gccacgtcta gggcagagcg ctcgtcctcc tgggaaggtg cctccccaac ctcctgggcg 3840 ggggccaggt cctctgtggg ctccaggtag agggcccgga tgtgagtctg cacatcccca 3900 tagaacatgg cctcccagaa ctgtggcgtg ctccacacca cgtgctcctg cacacagctg 3960 tatgcaaact gcgtcacccc cgggctcagc ttccggcaga aggctgtgac cagaggcagc 4020 agageegeeg caatgeeatg etegteeaga gaagtgeagt eetgeaggea geagtteate 4080 atacggacga caaagtcaaa ctgctggtgg tccaggaccg cacggttctg ctgcacatqc 4140 aggtgcaget cetgggegag geageggegg geagetegee cetteaggge ceteaacaeg 4200 gctgggagca gcttcttggc ctcaagcatt ttcccctcaa acacgtagga gatgcagttg 4260

```
cgcacaacct ccagccgccg ggcgctgttg acatgcagcc cactgcaccg ctccagtatg
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gcagtcatgg ggggccctga gggcacggtg gtcctcctct cggccttcac agctggggt
                                                                     4380
gcaccctgca tcttggctgc agcctggtcc acgatccact gcacggtgcc ctcatccagc
                                                                     4440
cgggggaagg gtcggggcac ccgtcgcagg tggctgctct caccgggcct ctgtaccttg
                                                                     4500
tgcatcgcca cggctgggta cgggttctcg ttcttgtaga gctgctctgc cagttcctgg
                                                                     4560
acgtgacgca ggacacgctg ggggtggttc tcatccgccc gcatccttgc cacctcgtgg
                                                                     4620
gccaccagct catcgaacag gtccgtaggg cggtatggga ccccacgctc tgacacaaag
                                                                     4680
ccagcaaagg ccatgccctc cagcaccttc atcaggaaat cgtcctctac cagcccacgc
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tggcccagga aggctgcctt atggaagcgg atgacaggct ccgggtggat gcgcacgacg
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tgcaggcacc agcgatagcc ctgcagcagc tgagcgaaca gccgcaggaa gaccgcgcgc
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teagecaact ceageteegg gteeaggace atgeteagea caetgtgegt etgaetetge
                                                                     4980
agtggctctg gcaagggtgg aatgtgcaca cactcaggaa tggtgaccgt ccctccatcc
                                                                     5040
agatcagcaa caatcacatc gagcagctcc tgggtctctg cctggaaggc cqcqttqacc
                                                                     5100
ccaatgatga agggcgtggg tgtgctgagg acctccagca gctgagccgg caggatgggc
                                                                     5160
acataggtga agctgtatct gagaggaaac agcagtgcca ggaggcccct acaggcatcg
                                                                     5220
gcgagccgct ggtagctccg ggacaggaag acctcgtgcc gaat
                                                                     5264
```

```
<210> 3514
     <211> 3376
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (2)...(2332)
     <223> similar to gi3043740 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3514
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                                                                   180
ggaggaggag acgccgcctc ggcagctcct tcagcgttac ctcgcggcgg ccggggagca
                                                                   240
gctggagccg gggctctgct actgtccgct ccccgctggc caggccggcg ccccgccgcc
                                                                   300
cteggeagee ccaegategg aegeetgeet getgggeteg ggeteeaaae aeegeggege
                                                                   360
ggaggtggct gatggccgcg cgccgcggca cgaaggcatg accaacggcg actcgggttt
                                                                   420
tetgeeggge egggaetgte gegatetgga agaggetege gggetggege gegeeggegg
                                                                   480
ccgggagtcg cgccgccgcc gcccctacgg ccgccttcgc ctggaggggc ctggcgacga
                                                                   540
ggacgcggac ggcgcgggaa gcccgtccga ttgggcctct ccgcttgagg acccqctqcq
                                                                   600
gagetgetge etggtggeeg eggaegeeea ggageeegag ggegegggea gegaeteggg
                                                                   660
ggacagecee gecageaget geageagtag egaggaetea gageageggg gagteggege
                                                                   720
cgggggtccc gaggaggcg cgcccctgc cacctcggcc gagaggacta atgggggtgc
                                                                   780
ggagccgcgc ctgggctttt ctgacattca cttcaactct cgcaacacgt tccaggtgag
                                                                   840
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                                                                   900
cgcggagcag ggtcctgcgg gggcttcggc ccgggctcga cggagtggcg gcttcgcgga
                                                                   960
cttcttcacc agaaaccttt ttccaaaaag gacaaaagga cctcaaatca gttgtccata
                                                                  1020
gtgctcctgg ttggaaatta tttggtaaag tccctcctag agagaatctt cagaaaacat
                                                                  1080
ccaaaatcat tcagcaggaa tatgaagcac gaacggggag gacctqtaaa ccaccacctc
                                                                  1140
agtetteaag aegeaagaat tttgaatttg ageegettte taecaetgee ttgattettg
                                                                  1200
```

```
aggatcgacc atcaaatctt cctgccaaat ctgtggaaga agctttacgt caccgacaag
                                                                     1260
aatacgatga gatggtggct gaggctaaaa aacgagaaat taaggaagca cataaaagaa
                                                                     1320
aaagaatcat gaaagaacga tttaagcagg aagaaaatat tgcaagtgca atggtaattt
                                                                     1380
ggatcaatga aatactgccc aattgggaag taatgcgtag tacaagaaga gttcgagaat
                                                                     1440
tgtggtggca gggattgccc cctagtgtcc gtgggaaagt ttggagtcta gctgtaggaa
                                                                     1500
atgaactaaa tatcactcct gaactttatg aaatcttcct ctcaagagca aaagaacggt
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qqaaaagttt cagtgaaaca agttcagaga atgatacaga aggtgtatct gttgctgatc
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gagaggccag tctggaatta attaagttgg acatatcccg tacatttcca tctctctaca
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qctacaggcc tgatgttqqt tatgtccaag ggatgtcctt cattgcagca gtactcattc
                                                                     1800
tcaatttgga agaggcagat gcctttatcg catttgccaa tctcctgaat aagccatgcc
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                                                                     1920
tattctttga agaaaatctt tccaaattat ttcttcactt caaatcttac agtcttacac
                                                                     1980
cagatatata cttgatagac tggatcttca cactatatag caaatcacta ccacttgatc
                                                                     2040
tggcctgtcg agtctgggat gtattttgca gagatgggga agaattttta tttaggactg
                                                                     2100
gattaggaat cctccgatta tatgaagata ttctcctgca gatggacttt attcatatag
                                                                     2160
cacagtttct aactaaattg ccagaagata tcacatcgga aaagctgttc agttgtattg
                                                                    2220
cagccattca gatgcagaat agcaccaaaa aatggactca ggtctttgca tctgtaatga
                                                                    2280
aggatattaa agaaggagac aagaacagta gtcctgcttt gaaaagctag tcttcaaaat
                                                                    2340
tgacagacta actgacatag aaaaagtggt ttttggataa aggttttttg tttcctatgt
                                                                    2400
aaaaggcgtg gaagaaaatg ttggagatac ctaaaagaat caagaggtgg aaaactgctg
                                                                    2460
attttacatt ttatggctga agtaaatgaa ataagtaact tattgacagt attaataaac
                                                                    2520
tattattttg tagggtaggg tcatttttc aaagggaaaa ggttttaagt ggtgagttta
                                                                    2580
tattccacaa tttggagtaa acaaaatgca ataaattttt aaaatagctt tgaagatact
                                                                    2640
tcaaattttt acatcttttc ttttgtaaca gttaccacaa agatattctg gaggctagag
                                                                    2700
taggattgtt aaatactact gttaacctcc aaagtactat agtacagaca ttqtttccag
                                                                    2760
ttctgacctt ttgaagatat tatagaccag taatgaacag atttggttgt aaattattta
                                                                    2820
aqtcactqaa gatqtcattt atcttcattc acaagttggg gcaaattcga gttacctagg
                                                                    2880
aactggaaat gttggtggga gattgtttat tgtttgttta gatgtttttc catagtatgg
                                                                    2940
tgtcccattg gttttttaag ggaaattttt ggtcttccct taagggaatt cctatcactc
                                                                     3000
agagaatttt agccattctg ggttctagtc taaccaaatt attcatccta ataatttgac
                                                                    3060
attaagaaaa cctataaata actggtagaa ggaaagtgct ttgcacttca gtggattgaa
                                                                    3120
gacttgactt tgagagtaag tccaaaaaca tatatgatgt ttctcagtga taaqagtaaa
                                                                    3180
aagtaatgaa tootgagagt tottaaacag catgotactt ggcaagactt catattttt
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agttacaatt cttccactgt ttaactccag tttgaaattt gaaatctaat atgtagctaa
                                                                    3300
atctgtgact tgtaaaactc tatgcataat ttttcctaat cagtqqaaat aagaataaaa
                                                                    3360
gaaaaaggta aagtta
                                                                    3376
```

```
<210> 3515
<211> 1824
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(1309)
<223> similar to gi414115 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3515

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                                                                      120
ctggcacagg cctgcctccc cctgccccag cccagggcca ggccacactc tgcctccaaa
                                                                      180
gecacegtee eccegaggea ecaetgeate ecceaagggg egggttegga ggaaggagga
                                                                      240
ggcaaaggag agccccagcg ccgcagggcc cgaggacaag agccagagca agcgcagggc
                                                                      300
cagtaacgag aaggagtcag cagccccagc ctcaccggca ccttcgccgg cgccctcgcc
                                                                      360
caccccagcc ccgccccaga aggagcagcc ccccgcggag acccctacag acgctqctqt
                                                                      420
cttgacctca ccccagccc ctgctccccc ggtgacccct agcaaaccaa tggccggcac
                                                                      480
cacagaccga gaagaagcca ctcggctctt ggctgagaag cggcgccagg cccgggagca
                                                                      540
gcgggagcgc gaggagcagg agcggaggct gcaggcagaa agggacaagc gaatgcgaga
                                                                      600
ggagcagctg gcacgggagg ccgaggcccg ggcggagcgg gaggcggagg cccggaggcg
                                                                      660
ggaggagcag gaggcacgag agaaggcgca ggccgagcag gaggagcagg agcggctqca
                                                                      720
gaagcagaaa gaggaggccg aagctcggtc gcgggaagag gcggagcggc agcgtctgga
                                                                      780
gcgggaaaag cacttccagc agcaggagca agagcggcaa gagcgcagaa agcgtctgga
                                                                      840
ggagatcatg aagaggactc ggaagtcaga agtttctgaa accaagaagc aggacagcaa
                                                                      900
ggaggccaac gccaacggtt ccagcccaga gcctgtgaaa gctgtggagg ctcggtccc
                                                                     960
agggctgcag aaggaggctg tgcagaaaga ggagcccatc ccacaggagc ctcagtggag
                                                                     1020
tctcccaagc aaggagttgc cagcgtccct ggtgaatggc ctgcagcctc tcccagcaca
                                                                     1080
ccaggagaat ggcttctcca ccaacggacc ctctggggac aagagtctga gccgaacacc
                                                                     1140
agagacactc ctgccctttg cagaggcaga agccttcctc aagaaagctg tggtgcagtc
                                                                     1200
cccgcaggtc acagaagtcc tttaagaggg tttgccttgg atccgggcac agttgtgagg
                                                                     1260
gctcctctgc atcacctacc aggatgtctg gaggagaaaa agacagaaca aagatggaag
                                                                     1320
tggcctgggc ccctgggggt gggtcctctc tgttgttttt aatctgcacc ttatagactg
                                                                     1380
atgtctcttt ggccggagcc agatctgccc ctcagtgcat tcgtgtgctc gcacgcgcag
                                                                    1440
acatecette teccecatae acaeatatae acteaeagee tetetggeet ettecettgg
                                                                     1500
ggaggggcca cctgtagtat ttgccttgat ttggtggggt acagtggatg tgaatactgt
                                                                     1560
aaatagcttg tgctcagact cctctgcgtg gagagggtgg gtgcaggagg cagacctcc
                                                                     1620
ccccaaagcc ccctggggag atcttcctct ctctatttaa ctgtaactga gggggatccc
                                                                     1680
aggtctgggg atgggggaca cettgggeca caggatactg gttgettcag gggtacceat
                                                                     1740
gccccctgcc ctcgcctgga atcagtgtta ctgcatctga ttaaatgtct ccagaaataa
                                                                     1800
agaataattc tgccaaaaaa aaaa
                                                                     1824
```

```
<210> 3516
<211> 1992
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1993)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1995)...(154)
<223> similar to gi2988397 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3516
tttttttttt ttgtggtgga tgagcactgg ggactttatt acacggaacg gcactcgtga

```
caacggaagg ggtgggcaga aatgcaggcc ggaacattcc accagtccag ggacggttgg
                                                                      120
tcattcagaa agtatgtatt tccagaacac tcagtagtaa ggccgtctgg gattgttcag
                                                                      180
ggggttgggc cggaagcggt aggccagcat catcctcttq cqqaaacqcc ttatacttct
                                                                      240
ctgtcctcct tgaagagctc cgccggccgg tcaatgccga agccaagcgc cgtccactgt
                                                                      300
ggtggtgccc ttgttcactg ggttcttgat ggccctggcc ctctgagccc agcccctcgc
                                                                      360
cctccttcca gcccatcttc atcagcatgt ggtagccgat gttctccaca gtcagcttga
                                                                      420
actccttgta ctctgagtag tcaggctcac ggccctcctt caggggcctt gaaggtctcc
                                                                      480
ataaactttt ccagctcgtc tggaggcagg aagtctccga tgaagtgctt qccccqqccc
                                                                      540
atctttgtca gctgctcggc ccattccctg gtcttatccn aacttcccat gcgcccgcaa
                                                                      600
gctggtgctc cccagtgccc agactcgttg ccacctccct atcactgtga tagcccgcct
                                                                      660
tgtgctgttg gactgccttc tcccacagca gctgcatgtc ctgcatggcc cgcttgtgct
                                                                      720
gcatgateat gtegtaeate tgetgeatet eetgetgete etteagetge ttettetggg
                                                                      780
cgtctgaaag ctctgtgacg cccactagac ccacaggctt ccccttctca tagccgagcc
                                                                      840
ccttgaggtc ctgaactgac agaggcgagg gagaggcatc cacgtccctc tgcaccagtt
                                                                      900
cagcaggtgg gagctctacc ttaatcctct tcaggccccc accggctctt ccgcttcctc
                                                                      960
ttcacggtgg ctgcggaggc tggcttcccg ggggcagctg gagcagggat gatagtgggc
                                                                     1020
gcaggcgtgg acgaggcggg gcaggtggtg gctgggggta aggaccctga cagggcctca
                                                                     1080
ggaggggact tgcgcttcag gccgggatca ggtqctqtqa aagctqcctq tgqaqctggc
                                                                     1140
cttggctttc cggaactcct ccagcttctg tcggtagtac ttgtaccctt gqctattqqq
                                                                     1200
ctcatacaga aagctgaatg ccctggttct cacggttgtt ctggagggca atggtttcca
                                                                     1260
cctcggaacc cccgtccgct atgaacctgg ccaacttttc tgcaaggttc ttgacctctt
                                                                     1320
cgtcctctgg gggtgaaact ttctgagagg ctgcctgcga cttctgtgct tcctttctta
                                                                     1380
teteageeae ettetteetg tagtagagga attecetget attettateg tgcaaaaatg
                                                                     1440
caaatgctgg gttatccttg tagtcctcca tagctacttt ttctaactcg gggcctcctt
                                                                     1500
ctgccacaaa gcgggccaat ttctctatca ctttccgagt ctcqqctccc tctqqqqqtq
                                                                     1560
aaactttgat ctccagccac tgctcatagt cctcctcctc gtcctcgtca ggggactgga
                                                                     1620
agacactcgg gcggtgcgcc acgggcagct gcttggcgtg ggagtagctc ttcacagggc
                                                                     1680
ccggcaggct ggccagcccc aggcctgtcc gcctgctgat gagcagggac ctcttcccag
                                                                     1740
cgttcagaaa ctgctgcaag aagctaccat cgttggcaaa cttgttggaa atgcaggaag
                                                                     1800
agttgtgtgc atttgtgatt tcgccaggat gtgggggctg agggctggcc acctgattct
                                                                     1860
qcttggcttt ctgttccatt ttggcttcaa tttcccgttt cttctgagcg atgagctctt
                                                                     1920
cctggtgaag gatgttcatg ttcattttc cagatttagg gggagcaacc ccaaaccacc
                                                                     1980
ggttagcctt tc
                                                                     1992
```

```
<210> 3517
<211> 1960
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1962)...(1307)
<223> similar to gi1510143 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3517
ttttgacttt gcaggatgtg ctttatttta agtcagccct gaacccaaac tacacaggat 60
caatttttga catattctag tccattcaat gattcttctc agaaactgta tcttaatatg 120
gaatgaaaac tacatttcaa tcataaattt ttcatgctac attgttattt aatgaagagg 180
ttgtattacc aataataata atttaagaaa aggccatttt tatttcccca agctcaatat 240
```

```
acatatttet tteataatta tgaaettaaa aaaaeeegte teagatgtaa aaatgtgaat
                                                                      300
tggaatatgt aaactctttg atatacctga aaaacaggaa ggaaaatgtc acatactggg
                                                                      360
aaaacccctt ccctttaatc atggaaatgg gaaaaagccc gtttaaggaa agggaaggcc
                                                                      420
aaaaaaccgt tcctgacctc agtttttaaa aaggttccaa gtttttttgg gccccctggg
                                                                      480
gtggtctttt tacttttttg ccccagttt gtttgcccag gagaccccag ccctccagaa
                                                                      540
tggtttccct ccttgaaagt ggtccctggt gggcccaaac caaaccgggg gtcccccct
                                                                      600
ttgttttgct ccctttttt tttttcctg agaagtcact ggtgtttaat ggaaaggtat
                                                                      660
cctattagtc cttggttaag ataaggcagt aagagtatca ctaatactat gtttttgctt
                                                                      720
agaatgaggc tgatcctttc cactggcgtc ttcacqqqca attaqttccc tctcttttgc
                                                                      780
tcctagaaac acaggtagga gctgtctgcc ccctattgct gttgcatttt cctgagtgtg
                                                                      840
ttgaaggete atetagtete ateacaagea getteeceag tggggatggg agegetgtat
                                                                      900
attgcattgt agcatctctc caaggaaagt gcacggggcc ccaacagggg aaaacaccag
                                                                      960
gcatctttct ttctgactcc tcttctgttt ctcttagggg acggggccca taaatgattc
                                                                     1020
cttcacatga tcaatcagaa tgcgagacac tgttgactaa aacataaagc aagtagccct
                                                                     1080
gatttcagag aaatggagtt acaaataaca ttttcaacag tgccttaact tgcaaggtag
                                                                     1140
cttttactgc agaaggatat cagctccttt tgtctaccta tcagaagaga aacaaaccat
                                                                     1200
ttccgtcgaa ctagaaatgc ttagctctta tgagaatatt gtgcttttaa aaaaaattca
                                                                     1260
aatgttaaca ttatttgcag tctgtgttct aaggtttcaa tttgtttttt ctctagtcca
                                                                     1320
tttgatcatt gtctctggtg agcgatatag gaatattaat ttggcataga gatcttcttc
                                                                     1380
tagctccagt tctcctgtct ctcgaactaa aaaaatatct gtgcacaact tcaaaattcg
                                                                     1440
atcccacatt tggaagctcc ttcaaacatg atggagtgag aaatcccact qaaqaattca
                                                                     1500
cggacaaatt tcccaatcac aaggacaact gaagcatata atcccataat accatagcca
                                                                     1560
gcccaggaac cccagacttg ggggactgac tttgtcattg aagaccacca gttccagggc
                                                                     1620
ctgagagttc ggattgtata ttctgtttcc agtcaggttg agaacccacc actcactgtt
                                                                     1680
atatttagtt gtattgtctc tggacaaaat gatggtaata tccatgaaat tattttcaga
                                                                     1740
taaaagttgc tttataggtt ttgagttaga atcactaggt gctttcacat aatatggata
                                                                     1800
aatcttttct atggtcactg gtgtttttga actttctgtg ctgttgcctg ctatcatttt
                                                                     1860
agcqatattc tttcgagtaa tatttttaag aggaaaagaa agcttatctg ttgctatttc
                                                                     1920
cgattttgca cccagactta agtttctctg aatactccat
                                                                     1960
     <210> 3518
     <211> 1031
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (940)...(426)
     <223> similar to gi2228750 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3518
tttttttttt ttacagataa aaacacttta tttaaaagta taaaaccagg cttactcctt
                                                                       60
caaactgctc ccacccctaa ttatctccac aaagagctat ataaattggg caggggtatg
                                                                      120
tgtacagtca tctcagctct aacaacccca gttcttcttt caattctcct ttctcccttc
                                                                      180
atacaattga gatgtttgtc ctttgcactt tccccaagat agcaaaggtg atacaaatgt
                                                                      240
ggaaggaggg gaagtgtaga aaataaactg tcatcatcct ctattcccat ctccagggaa
                                                                      300
cagacagatt atatgaactc tgaccaaatg atttgcttgt ctgaagaaac aaataatagg
                                                                      360
tacagttact ctctgtatcc taaagaaaga cacgagggtc cagagtcctt cttcagtata
                                                                      420
```

480

tagcctcgtc catattgtca tcactgtcac caccaaagtc ctctccattg tcaaaatatg

<210> 3519

<210> 3520

```
acatgatgta atcagtttcc tcttcatgtt cttcttcatc atactcttct tcttcctct
                                                                     540
cttccttctc ttcttcttct tctttctcct catcctcctc tgaagttact tcttcttcct
                                                                     600
tcttctccag ggtctctagt ttctgtattg tttcctcctt atcttctgtg gtcttagggg
                                                                     660
gcctcttggg gagcagaatt gtaatccgtt ccttctgtag cttccqcact cqqatcttta
                                                                     720
gctcccgggg tagacgccgc caatcagggt tccaatcgat ggcattgtca atcggacctg
                                                                     780
acatctgata tttgtctgaa taacgctcca catctctctt ggggacagct ggccggatga
                                                                     840
agtaggggag ctgcctcatg gctcctcgta gctcttgctt cagtgccagg acatattccc
                                                                     900
cttcctcgcc tgagggcaaa ggtactgggc gcaactccaa qqqctqctqc ccctcccaa
                                                                     960
agcggagccc aagccgcgac caacttgaaa tgtactgggc ttcctcaagt cgacacggca
                                                                    1020
ccacactgga c
                                                                    1031
```

```
<211> 754
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (731)...(55)
     <223> similar to gi673456 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3519
tttttttcac caaacaaac aagattttta atgtgataat ggattgccta tttcacatgt
                                                                       60
taaattgctc tatgcaggga gatttcacaa tccaggatcc atagccatgt tgttgtaagt
                                                                      120
aggatttcaa cttacattta gcttcttgat aggaggcaga catacactta gctgcatgat
                                                                      180
atgtaccage ttcaagtaat tettttttag ettetttgge aageaggtta aacegaetta
                                                                      240
acatttgcag ccttacaaag ccgacttgcc attgacatac cacttttaaa tggggaactt
                                                                      300
tcaagtgatc ttcccactca ggccatccac aatctccaaa gaaacatctc cttggtgccc
                                                                      360
aattcagact cagaaattta tattccaagt tcatttgaag gggatatgca gagggtacta
                                                                      420
aactaatatg aggtctgttg actaagtaaa acattggaag ttttgaagtg agtgcatcat
                                                                      480
caacacgttg ctttatagcg atttctaagc ctctggtatc actgcaattc ccatcaccaa
                                                                      540
taagtatact gctgatgtaa actggctgta taaaatgact cagcaatqct ccctgtacac
                                                                      600
caagcacttc ccatctggtc aatttgtcac ttgaggacat actgcttatt ctattaacac
                                                                      660
catctttagg acagtaaaca gtcagataaa ttttgccttc aacagccacg tggagacaga
                                                                      720
gttcttcatt cggacgcgtg ggcggacgcg tggg
                                                                      754
```

```
<211> 1815

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3)...(1815)

<223> similar to gi4529897 in the genepept database release 114,
```

```
<400> 3520
acctccaggc tgcaaaactg gcccttctag cctccatcca ggccttcagc cttctgcgaa
                                                                       60
gccgcctggg agacagggat ttctccaggc tgctggacat caccccagcc tccagcctga
                                                                      120
getttgteet ggacaceacg ggeageatgg gtgaggagat caacgetgee aaaateeagg
                                                                     180
ctcgccacct tgtggagcag cggagaggca gcccatgga gcctgtccac tatgtcctgg
                                                                     240
tgccttttca tgacccaggg ttcggccctg tctttacaac cagtgaccct gacagcttct
                                                                      300
ggcaacagct taatgagatc catgccttgg ggggtggaga cgaqcctgag atgtqcctgt
                                                                      360
cagccctgca gctggccctg ctgcacacac ctccactctc agatatcttt gtcttcacgg
                                                                      420
atgcctcccc caaggatgcc tttctcacca accaggtgga atccctgact caggagcggc
                                                                      480
gctgccgggt aacattcctg gtgactgaag atacatcaag ggttcagggt cgagctcggc
                                                                      540
gtgagatctt gtcccctctg cgttttgagc catacaaagc agtggccctg gcctcaggag
                                                                     600
gagaggtgat cttcaccaaa gaccagcaca ttcgagacgt ggcagccatt gttggggaga
                                                                     660
gcatggctgc cctggtgact cttcccctgg accctcctgt tgtggtgcct gggcagccac
                                                                     720
ttgtgttcag cgtggatggg ctgctccaga agatcacagt ccggatccac ggagacatca
                                                                     780
gcagcttctg gatcaagaac cctgcagggg tctcccaggg ccaggagaag cgggggtcct
                                                                     840
ctagtcacac tcgccgcttt gggcagttct ggatggtgac catqqatqac cctccacaqa
                                                                     900
caggaacctg ggagatccag gtcacagctg aggacacccc tggggtgaga gtgcaagccc
                                                                     960
agacctccct ggacttcctc ttccactttg ggatccccat ggaggatgga ccccaccctg
                                                                    1020
gcctctaccc cctgactcag ccagttgcag gtcttcagac ccagctgctg gtagaagtga
                                                                    1080
cagggttggg ttccagagcc aatcctgggg atcctcagcc gcatttctcc cacgtcatcc
                                                                    1140
ttcgaggggt cccagagggt gccgaactag gccaggtgcc cttggagccc gtgggacctc
                                                                    1200
cggagcgagg tctcctcgca gcctcgctgt cgcccacgct gctgtccacc cctagaccct
                                                                    1260
tetecetgga getgattgge caggaegeag eggggeggeg cetgeacagg getgeecete
                                                                    1320
agcctagcac tgtagtccct gtccttctgg agcttagtgg cccctcgggt ttcttggccc
                                                                    1380
cgggcagcaa agtcccgctc agtctccgca tcgccagctt ctcgggccct caggatcttg
                                                                    1440
accttaggac tttcgtcaac cccagettet cecteacete caacetetee agggeteace
                                                                    1500
tggaactgaa tgagtcggcc tggggccgcc tgtggctgga ggtcccagat tcagcggccc
                                                                    1560
cggattccgt ggtgatggtg actgtgactg cagggggacg agaagccaac ccagtacccc
                                                                    1620
cgactcatgc tttcctccgg ctcctggtat cqqccccaqc cccqcaqqac cqqcacacca
                                                                    1680
cccctaccgg ctcatctgac ccgatcctca ccacqqccac ccctqccttt tcccccttca
                                                                    1740
cattggtgac tcaaggcagg gctggggcaq gqctqqctqc qqqcaqcccc tqqtqqqqca
                                                                    1800
cagttggagg ggtgc
                                                                    1815
```

```
<210> 3521
<211> 1811
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1737)...(855)
<223> similar to gi3387971 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3521

```
ttttttttt tttatatata aaactgcttt attaaaaagt cagctattag gaaaacaaag
                                                                       60
cccttacaag ggttctatca aaaagtacaa attttaaata aatgcatcag aaaaatggca
                                                                      120
gccagatata ccagccacag tcacaacctc aaaggccttg tggggaagga agggagaatt
                                                                      180
agggaggagg ttccgagaac tcaaggaaga ggctgggcac agagggtctt tgggtgcctg
                                                                      240
cagagetggg teetggaget accaggeaag aaccetgett eegtttteet tteettggaa
                                                                      300
aaatgtaaag aactggcagg tgtaggaaat tttgagactg gagcagaaag gcacaaaagt
                                                                      360
catttataag gtatgattgc tcactctagt cctgaggcac atggggtgga taaatggggg
                                                                      420
atcagagcca cagggtccct ggctctggtc atgcttgccc ctggctggta ccatctctga
                                                                      480
gtttggccac aggttaaatt aaggtagacc aagtggactg cataatcctg gcagcccggg
                                                                      540
gtctggagcc agtctttaga tcagatgtgt tgcttcattg gcaaactggt gtctgcccc
                                                                      600
caagagatcc ccccaatgag gagcagcagg tctcctgcct agccctgtcc tctgagtcac
                                                                      660
tgtgggtgcc caccetggac aaggaactte tgagggcagt etetgecate caggateetg
                                                                      720
agaagcccca agccccagag ccagagtttc tccgaatgac aggcagaagc acagaaagct
                                                                      780
ggcgttgaaa ccagtcccca ccagctgctg gccccacacc catggtcact gctgacacgc
                                                                      840
ctccttggtg acattaggca gtgggtaggc aaagagggag aagtccagga tatacttagg
                                                                      900
cagcacatcc tgcagcaggg cccggggggc actgcacaag tggtaatgca ggctttcggg
                                                                      960
gctggctggc cggtaccagg cctggcgagc tggaaatcgg acgtgaggtg gtgcccgtac
                                                                     1020
ccactccagc acctgatttg catcagcctc cagcctctca taggagccca caaagtcata
                                                                     108.0
gtgcacggca caaggctggc acaggtggta cacgggcatc caatgctcat tcatgcgctc
                                                                     1140
agggtcctca tccaccaggt atctcaggaa ctcggggaat gtgacatcgt cgcctgcagg
                                                                     1200
qctqqqcccc gctccagccc tgtaccgcct cactatctca gccccatagc gttgctggta
                                                                     1260
ctctcggatc tcgccaaact tgttgcggta ggcagagagg aggcgttcca agggctcccg
                                                                     1320
cacaaacagg aacttaaagt agtgctgcag gcggtagcga atctcctcag gccgcaggtc
                                                                     1380
ggccaggaac accaggtcac tgcggtggtc catcttgagg cggacgtcca cgctgtccag
                                                                     1440
gacgcctgcc agcaccttca tcacccgctt ccagttagag caggccacct tggggacgta
                                                                     1500
gcagtagagg aagcggtaac ggtcacttac gaggatgtgg cgcagcaggg tgcgccqctq
                                                                     1560
ccccaccggc aagtcccagg ggtcccgggg catgcctggc tgtccgcaca ccgcccgcag
                                                                     1620
ggtcctgttc cggacgtcct gccgcacttg caagtccgcg tccccagccc tgagggacag
                                                                     1680
gcccccaggc ttgggggctt tcccgcgcca ggctgtgccc tcgcggccgg gcgggtgcag
                                                                     1740
gggcaggggc ttcttctcgg ccaggatgcc ccgctcgatt atgagcagca gcccgctgga
                                                                     1800
ggccacgatc t
                                                                     1811
     <210> 3522
     <211> 1522
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (51)...(1377)
     <223> similar to gi4580995 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3522
ccacacgcgt ccgcccacgc ggccgataga tgtacatcgc gagcgggcga cctttctqtc
                                                                       60
cetegttegg etgteegege teetegeeca geceetactg egegeeegte etetacgegg
                                                                      120
gcctgctgct actcggcctg gccgccagct ccgtgcggag caacctcacc tccttcggtg
                                                                      180
ccgaccaggt gatggatctc ggccgcgacg ccacccgccg cttcttcaac tggttttact
                                                                      240
ggagcatcaa cctgggtgct gtgctgtcgc tgctggtggt ggcgtttatt cagcagaaca
                                                                      300
```

360

tcagcttcct gctgggctac agcatccctg tgggctgtgt gggcctggca tttttcatct

```
tectetttge cacceegte tteateacea ageceeegat gggeageeaa gtgteeteta
                                                                      420
tgcttaagct cgctctccaa aactgctgcc cccagctgtg gcaacgacac tcggccagag
                                                                      480
accytcaaty tycccycyty ctygccyacy agagytctcc ccayccaygy ycttccccyc
                                                                      540
aagaggacat cgccaacttc caggtgctgg tgaagatctt gcccgtcatq qtqaccctqq
                                                                      600
tgccctactg gatggtctac ttccagatgc agtccaccta tgtcctgcag ggtcttcacc
                                                                      660
tecacatece aaacatttte ecagecaace eggecaacat etetgtggee etgagageee
                                                                      720
agggcagcag ctacacgatc ccggaagcct ggctcctcct ggccaatgtt gtggtggtgc
                                                                      780
tgattctggt ccctctgaag gaccgcttga tcgacccttt actgctgcgg tgcaagctgc
                                                                      840
ttccctctgc tctgcagaag atggcgctgg ggatgttctt tggttttacc tccqtcattq
                                                                      900
tggcaggagt cctgggagat ggagcgctta cactacatcc accacaacga gaccgtgtcc
                                                                      960
cagcagattg ggggaggtcc tgtacaacgc ggcaccactg tccatctggt ggcagatccc
                                                                     1020
tcagtacctg ctcattggga tcagtgagat ctttgccagc atcccaggcc tggagtttgc
                                                                     1080
ctactcagag gccccqcqct ccatgcaggg cqccatcatg ggcatcttct tctqcctqtc
                                                                     1140
gggggtgggc tcactgttgg gctccagcct agtggcactg ctgtccttgc ccgggggctg
                                                                     1200
gctgcactgc cccaaggact ttgggaacat caacaattgc cggatggacc tctacttctt
                                                                     1260
cctgctggct ggcattcagg ccgtcacggc tctcctattt gtctggatcg ctggacgcta
                                                                     1320
tgagagggcg tcccagggcc cagcctccca cagccgtttc agcagggaca ggggctgaac
                                                                     1380
aggccctatt ccagcccct tgcttcactc taccggacag acggcagcag tcccagctct
                                                                     1440
ggtttccttc tcgggtttat tctgttagaa tgaaatggtt cccataaata aggggcatga
                                                                     1500
gcccttcctc acgaaaaaaa aa
                                                                     1522
    <210> 3523
     <211> 961
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (5)...(434)
     <223> similar to gi5726306 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3523
ccggcacgag ttcatggcgc tgtgcatgcg ggacttcgtg gaccactaca acggctggat
                                                                       60
ctggggtcac cagggcccgc agctgctcac gcgggtcttc aagaagtggt gttccatccg
                                                                      120
cagootggco gagagoogog cotgoogogg ogtoaccaco otgooccotg aggoottota
                                                                      180
ccccatcccc tggcaggact ggaagaagta ctttgaggac atcaacccgg aggagctgcc
                                                                      240
geggetgete agtgeeacet atgetgteea egtgtggaae aagaagagee agggeacgeg
                                                                      300
gttcgaggcc acatccaggg cactgctggc ccagctgcat gcccgctact gccccacgac
                                                                      360
gcacgaggcc atgaaaatgt acttgtgagg ggcccgccag gtcacctccc caacctgctc
                                                                      420
```

480

540

600

660

720

780

840

900

960 961

ctgatggggc actgggccgc ccttcccggg gaggcaagat tgagggcccg ggagagggag

gcccgagctg ccaccgggct taggcaggct gttgaggagc tgtgggagca ggcccagtgg

gaggetgtgg acacceegag gaeagtgtee tgtetegagg eagggetgae acatggtgee

atagccagcg gagggcgctc agtgagtgcc ccgggccttc tagacaacag gcaggaagga

tgaacctcag ggcaccccca ggtggtgcgg aaagccaggc agttgggaca gaggtgccca

cgagggcaga ggccggtgct aaggggatgg ggaagaaggg acaagattcc cagagaggag

aggaggetgt tggtaggaaa gtggcaggge tgggggagae ccageeteea aggteegggg

eggatgatge tetgttettt tetggttttg qtteetettt cetgqqqqqt qqaqqqte

attccgccac tggctttcgc actatgccat ataacgccat cctggtctag gacctctttt

```
<210> 3524
<211> 1944
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(732)
<223> similar to gil644455 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3524 eccetectee ecetectete ectaateaag tacceetee tectecacea ectectgeee 60 cacccctccc tgcatctgga ttctttttgg catccatgtc agaagacaat cgccctttaa 120 ctggacttgc agctgcaatt gccggagcaa aacttaggaa agtgtcacgg atggaggata 180 cctctttccc aagtggaggg aatgctattg gtgtgaactc cgcctcatct aaaacagata 240 caggccgtgg aaatggaccc cttcctttag ggggtagtgg tttaatggag gaaatgagtg 300 ccctgcttgg gccaggagga gaagaattgc tgaaaaggga tcaacattag aaacagaaca 360 aaaagaggac acaggtgaag attcagagcc tgtaacttct aaggcctctt caacaagtac 420 acctgaacca acaagaaaac cttgggaaag aacaaataca atgaatggca gcaagtcacc 480 tgttatctcc agacgggatt ctccaaggaa aaatcagatt gtttttgaca acaggtccta 540 tgattcatta cacagaccaa aatccacacc cgttatcaca gcccagtgcc aatggagtcc 600 agacggaagg acttgactat gacaggctga agcaggacat tttagatgaa atgagaaaag 660 aattaacaaa gctaaaagaa gagctcattg atgcaatcag gcaggaactg agcaagtcaa 720 atactgcata gagggaccag actaaggaga gataggactt taatctggag gaaaaatatc 780 ctacaaacaa caactgttca caacagcaaa cccctacatt tatgagctgt aagaagaaaa 840 tggagacaaa cagaaggagg gaaaaaccaa cctactctga aagccttcag acattatgac 900 tctggtgata agctctttcc ctctccgttt gctgcttttt tctggccttt acaacagaat 960 ggaagagaat catttaagag ttcctgtaac agttatgcag aaaatactaa aacccatcag 1020 gcaagatcac cacgcattga aatattttca tatcaagata aagtcgcaca ttttccacaa 1080 tacattgcta aaataaagag gagaaaggct taggaagttt ttttgcagag agtgctggta 1140 aagaattgag caagtttgct attgtattgt aatgtttctc tcaggtttgt tcttcctatc 1200 atgtttgata ttccatgaat aattgagatc agccctatgt aagttaagat cataatatgt 1260 ggaacaaatg gaattgtaag tgctttcaaa gggtaatatt tataagaaag tgtccqaaaa 1320 atgtttcttc agcttgagaa attttagaat gataggaagt ttctcgagtt agccttcatg 1380 caattttgta gattaaaaca taaaatttgt ccagaactta aagatttaga tgccttccta 1440 aattgttaca atgctttacc aaatctatga cttctacata acacaaacca gtggtcaaat 1500 gtaaacacta tattgtagat ttactgtagg ttttcaacct tttttagatt tatgcatgtg 1560 gacattttta taatgtaatt acaatcacca caaggttagc ttttttaatt gcagacagta 1620 atgcatgtca cactaatatg tagtggcctt ttcaaggcct agtcccaggg aaaacatttt 1680 1740 gcactatctt tttctcagtt acctgcatga ataaataatg agaaatattt tgtgacttta 1800 attggtaaat atgttacaaa accaagtact taatctttta catcatgtct tcagctattt 1860 gtattttaac cagtaatttc aatggtctga aacatgattc tgagcttcac ataatatctt 1920 aactgtggaa ctcaaaagtt tgat 1944

```
<210> 3525
<211> 3671
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3638)
<223> similar to gi3928000 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3525 atggatccgc cggcgggagc cgctcgccgc ctgctctgcc ccgcgctgct gctgctg 60 ctgctgctgc cgccgccgct cctgccgccg ccgccgccgc ccgcgaacgc caggctcgcc 120 gccgccgccg acccccagg cgggcccctg gggcacggag cggagcgcat cctggcggtg 180 cccgtgcgca ctgacgccca gggccgcttg gtgtcccacg tggtgtcggc agctacgtcc 240 agagcagggg tacgagcccg cagggccgcc ccggtccgga ccccqagctt ccccqqaqqc 300 aacgaggagg agcctggcag tcacctcttc tacaatgtca cggtctttgg ccgagacctg 360 cacctgcggc tgcggcccaa cgcccgcctc gtggcgcccg gggccactat ggagtggcag 420 ggcgagaagg gcaccacccg cgtggagccc ctgctcggga gctgtctcta cgtcggagac 480 gtggccggcc tagccgaagc ctcctctgtg gcgctcagca actgcgatgg gctggctggt 540 ctgatccgga tggaggagga ggagttcttc atcgaaccct tggagaaggg gctggcggcg 600 caggaggctg agcaaggccg tgtgcatgtg gtgtatcgcc ggccacccac gtccctcct 660 ctcggggggc cacaggccct ggacacaggg gcctccctgg acagcctgga cagcctcagc 720 egegeeetgg gegteetaga ggageaegee aacagetega ggeggaggge acqeaqqeat 780 gctgcagacg atgactacaa catcgaggtc ctgctgggcg tggatgactc tgtggtgcag 840 ttccacggga aggagcacgt acagaagtac ctgctgacac tcatgaacat tgtcaatgaa 900 atctaccatg acgagtcctt gggtgcccac atcaacgtgg tcctggtgcg gatcatcctc 960 ctgagctatg gaaagtccat gagcctcatc gagatcggga acccctctca gagcctggag 1020 aatgtctgcc gctgggccta cctccagcag aagccagaca cgggccacga tgaataccac 1080 gatcacgcca tetteeteac aeggeaggae tttgggeett eeggeatgea aggetatget 1140 cctgtcaccg gcatgtgcca tccggtccgc agctgcaccc tgaaccatga ggacggcttc 1200 tcctcagcgt ttgtggtggc ccatgagact ggccacgtgc tgggcatgga gcacgacggg 1260 cagggcaacc gctgtggcga cgaggtgcgg ctgggcagca tcatggcgcc cctggtgcag 1320 gccgccttcc accgcttcca ctggtcccgc tgcagccagc aggagctgag ccgctacctg 1380 cactectatg actgeetget ggatgaeece ttegeecacg actggeegge getgeeceag 1440 ctcccgggac tgcactactc catgaacgag caatgccgct ttgacttcgg cctgggctac 1500 atgatgtgca cggcgttccg gacctttgac ccctgcaagc agctgtggtg cagccatcct 1560 gacaacccct acttttgcaa gaccaagaag gggcccccct tggacgggac tatgtgtgca 1620 cctggcaagc attgttttaa aggacactgc atctggctga cacctgacat cctcaaacgg 1680 gacggcagct ggggcgcttg gagtccgttt ggctcctgct cacgtacctg tggcacgggc 1740 gtgaagttca ggacccgcca gtgtgacaac ccacacccgg ccaacggggg ccgcacctqc 1800 togggoottg cotacgactt coagetotge ageogecagg actgeocega etecetgget 1860 gacttccgcg aggagcagtg ccgccagtgg gacctgtact tcgagcacgg cgacgcccag 1920 caccactggc tgccccacga gcaccgggat gccaaggaga gatgccacct gtactgcgag 1980 tccagggaga ccggggaggt ggtgtccatg aagcgcatgg tgcatgatgg gacgcgctgc 2040 teetacaagg aegeetteag eetetgtgtg egeggggaet geaggaaggt gggetgtgae 2100 ggtgtgatcg gctccagcaa gcaggaagac aagtgtggcg tgtgcggagg ggacaacagc 2160 cactgcaaag tggtcaaggg cacgttcaca cggtcaccca agaagcatgg ttacatcaag 2220 atgtttgaga tccctgcagg agccagacac ctgctcattc aggaggtaga cgccaccagc 2280 caccatctgg ccgtcaagaa cctggagaca ggcaagttca tcttaaatga agagaatgac 2340 gtggatgcca gttccaaaac cttcattgcc atgggcgtgg agtgggagta cagagacgag 2400 gacggccggg agacgctgca gaccatgggc cccctccacg gcaccatcac cqttctqqtc 2460

```
atcccggtgg gagacacccg ggtctcactg acgtacaaat acatgatcca tgaggactca
                                                                     2520
ctgaatgtcg atgacaacaa cgtcctggaa gaggactctg tggtctacga gtgggccctg
                                                                     2580
aagaagtggt ctccgtgctc caagccctgt ggcggagggt cccaqttcac caagtatggc
                                                                     2640
tgccgccgga ggctggacca caagatggta caccgtggct tctgtgccgc cctctcgaag
                                                                     2700
cccaaagcca tccgcagagc gtgcaaccca caggaatgct cccagccagt gtgggtcaca
                                                                     2760
ggcgaatggg agccatgtag ccagacctgt qqqcqqacaq qcatqcaqqt qcqctccqtq
                                                                     2820
cgctgcattc agccgctaca cgacaacacc acccgctccg tgcacgccaa gcactgcaat
                                                                     2880
gacgcccggc ccgagagccg ccgggcctgc agccqcqaqc tctqccctqq tcqttqqcqa
                                                                     2940
gccgggccct ggtcccagtg ctcagtaacc tgtggcaacg gcacccagga gcggccagtg
                                                                     3000
ctctgccgca ccgcggacga cagcttcggc atctgccagg aggagcgtcc tgagacagcq
                                                                     3060
aggacetgea ggettggeee etgteeeega aacateteag ateceteeaa gaagagetae
                                                                     3120
gtagttcagt ggctgtcccg cccggacccc gactcgccca tccggaagat ctcgtcaaag
                                                                     3180
ggccactgcc agaggcgaca agtcaatatt ctgtaggatg gaagtcttgt cacqctattg
                                                                     3240
ctccatccaa ggctacaaaa gcgttgttgc aaaagtcctg taacctgtac aacaacccca
                                                                     3300
ccaacgtgga gggcaggata gagccaccgc ctgggaagca caacgacatt gacgtgttca
                                                                     3360
tgcctaccct cccagtgccc actgtagcca tggaggtgcg gccatcacca agcaccccc
                                                                     3420
tggaggtccc tctcaatgcc tccagcacca atgccacaga ggatcaccca gaaaccaatg
                                                                     3480
ccgtagatga accctacaaa atccatggcc tggaaqatga agtccagcca cccaacctaa
                                                                     3540
tccctcgacg accgagcccc tatgaaaaga ccagaaacca aagaatccaa gagctcattg
                                                                     3600
atgagatgcg gaagaaagag atgctcggaa agttctaata aaatggaaag atagcatccc
                                                                     3660
taaaaaaaaa a
                                                                     3671
```

```
<210> 3526
<211> 1306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1298)...(158)
<223> similar to gi311626 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3526
ttttttttt ttaaaaatga tctcttctcc tttattgcca cattcacata aaacgttttg
                                                                       60
atatatttgg gttggtaaaa gctaaagaaa attgaagtta aaatatatat ggttttagtg
                                                                      120
ttccgaaaag cagttacaga ttgcttcctt ggtttaatta tcgaagcggt cgaaattctg
                                                                      180
ggtttgaaac tcttggaagt cctcagggat ggtgtcattg cagcgatact tgaggttgga
                                                                      240
ccagatgatg ttttcttgag agaagcagaa aacgccaagt cggcctccac qcattgtqgt
                                                                      300
gtctatggtg acgccagagt cagccaccaa ctcagagcct tcataaaatc gtaccctgat
                                                                      360
gtagcccacc tggggcctgt gctgtaggaa ccagcggtag gacaccttgt ccttccagcc
                                                                      420
cacatteetg gagteettee acageageet gaeetggtea etggtgteee eegtgtgeea
                                                                      480
cagggagttc cggagatgct cccctggacc tgtcttagac ttcacagcct tgagctgaat
                                                                      540
gccaggttct gcaactgctc ggaatggggt ggcttgccaa tatgtctgct ccgtctgctt
                                                                      600
ccacatgacc acgtagaagc tggagctatc ttggtagcca aagataaagc ctgcatagtc
                                                                      660
atcatctgtc tgggtattca catggaaggt cccttcqaaq tcaactccat taaaaagctq
                                                                      720
tgtaccccac tgccaggcca ggatcactgt tcatggtctg tacaatctcc atgccctggt
                                                                      780
tcaggaccac ccagttggga tcgatctggg catccccttc aggatccagg accacggtct
                                                                      840
ggtaagccct gaagtcggtc agggtgacct ctgcqttctc tqqqcaqacq tcqatccqat
                                                                      900
cgatgacctg gtcctggtca aagtcagact cacagatgtc tcccactccg tcgctgttgc
                                                                      960
```

<210> 3527

```
tatcctcctg ggctggttg gggaccagcc ggcagttgtc tggtccaggg ggcaccaggt 1020 ctgggatacc atcattgtca tcatcatcat cacactcgtc accaattcca tccttatcgg 1080 tgtccagctg ggcactgtta atgacggtgg ggcagttgtc tgtgctgtcc tggtgcccat 1140 ctccatcact gtcctgattg gtgtcacagg agtccccaac cagatcatta tccacatcag 1200 actggttagg gttgctgaca tcaggacaac.tgtcacaggc atccccaca ccatcaccat 1260 ccttgtcccg ttggtcacga ttgggaaatt ttgggcagta cgaaat 1306
```

```
<211> 5940

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(5824)

<223> similar to gi4808815 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 3527 atgagttccg actctgagat ggccattttt ggggaggctg ctcctttcct ccgaaagtct 60 gaaagggagc gaattgaagc ccagaacaag ccttttgatg ccaagacatc agtctttgtg 120 gtggacccta aggagtcctt tgtgaaagca acagtgcaga gcagggaagg ggggaaggtg 180 acagctaaga ccgaagctgg agctactgta acagtgaaag atgaccaagt cttccccatg 240 aaccctccca aatatgacaa gatcgaggac atggccatga tgactcatct acacgagcct 300 gctgtgctgt acaacctcaa agagcgctac gcagcctgga tgatctacac ctactcaggc 360 ttgttctgtg tcactgtcaa cccctacaag tggttgccag tgtataatgc agaagtggtg 420 acagcctacc gaggcaaaaa gcgccaggaa gccccaccc acatcttctc catctctgac 480 aatgcctatc agttcatgct gactgatcgg gagaatcagt ctatcttgat caccggagaa 540 tctggcgcag ggaagactgt gaacaccaag cgtgtcatcc agtactttgc aacaattgca 600 gttactgggg agaagaagaa ggaagaagtt acttctggca aaatgcaggg gactctggaa 660 gatcaaatca tcagtgccaa ccccctactg gaggcctttg gcaacgccaa gaccgtgagg 720 aatgacaact cctctcgctt tggtaaattc atcaggatcc acttcggtac cacagggaaa 780 ctggcttctg ctgatattga aacatatctt ctggagaagt ctagagttac tttccagcta 840 aaggctgaaa gaagctatca tattttttat cagatcatgt ctaacaagaa gccagatcta 900 attgaaatgc tcctgatcac caccaaccca tacgattatg ccttcgtcag tcaaggggag 960 atcacagtgc ccagcattga tgaccaagaa gagttgatgg ctacagatag tgccattgaa 1020 attctgggct tcacttcaga tgaaagagtg tccatctata agctcacagg ggctgtgatg 1080 cattatggga acatgaaatt caagcaaaag cagcgtgagg agcaagctga gccagatggc 1140 acagaagtcg ctgacaaggc agcctatctc cagagtctga actctgcaga cctactcaaa 1200 gccctctgct accctagggt caagggtggc aatgagtatg tcaccaaagg ccagactgtg 1260 caqcaggtqt acaatgcggt gggtgctctg gccaaagccg tctacgagaa gatgttcctg 1320 tggatggtca cccgcatcaa ccagcagctg gacaccaagc agcccaggca gtacttcatc 1380 ggggtcttgg acattgctgg ctttgagatc tttgatttca acagcctgga gcagctgtgc 1440 atcaacttca ccaatgagaa actgcaacag tttttcaacc accacatgtt cgtgctggag 1500 caggaggagt acaagaagga aggcattgag tggacgttca ttgactttgg qatqqacctg 1560 gctgcctgca tccgagctca tcgagaaagc ctatgggcat cttcttccat cctggaagag 1620 gagtgcatgt tccccaaggc gacagacacc tccttcaaga acaagctgta tgaacaacat 1680 cttggaaaat ccaataactt ccagaagccc aagcctgcca aaggcaagcc tgaggcccac 1740 ttctctttga ttcactatgc tggcaccgtg gactacaaca ttgccggctg gcttgacaag 1800 aacaaggacc ccctgaatga gactgtggtg gggctgtacc agaagtctgc aatgaagact 1860

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tcccaggtca acaagctgag ggtgaagagc agggaggttc acacaaaaat cataagtgaa
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5940
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     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (190)...(313)
     <223> similar to gil335864 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
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                                                                      180
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                                                                      240
tgaaggtaga agtcacagag ttgcaggatg tggaqtqcqa qqaqtqqccc cqqqqaagca
                                                                      300
gctccaactg agggtgatta aaatctgaag caggccgggc gcagtggctc acatctgtaa
                                                                      360
tcccagcact tttggaggcc gaggcaggtg gatcacctga cgtcaggagt tcgagaccag
                                                                      420
cctgggcaac atggtgaaac cccgtctctg ctaaaaatac aaagttagcc aggcatggtg
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<210> 3529
<211> 4655
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(4574)
<223> similar to gi2224667 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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tectgagece agecagggag gaaagaggee tgagtggeaa gtecaeeeeg gageceaege
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cccagcagcc ggagcctgta ctgggtctgg gcagtgttga gcaaccccac gaagtaccca
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gtgtccttgg caccccttg ctgcagccc cagaaaacct tgccaagggt cagcccagca
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cgcccgtgga caggcccctg ggccctgacc cttctgctcc tggtaccctt gctggggcag
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ccctaccccc actggagccc ccagccccct gcctgtgcca ggacccccag gaagactctg
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tggaagacga ggagccccca ggctctctgg gcctcccacc gccccaggca ggagtccagc
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ctgccgctgc tgctgtctca ggaaccacac agcctctggg gactgggccg cgagtcagcc
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tetegeetea etececaete eteageecea aggtggeete catggatgee aaagaeetgg
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cettgcagat ettgccgcet tgccaagtge etcetecete tgggccccag ageccagetg
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agtccaagaa catcctcttt gtcatcgcca agcctgatgt cttcaagagc ccagcctcag
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gggccaaggc cgtgcgggct ctgagagaca accacagtga catcgtcaac gccatcatgg
                                                                     4560
aactgaccat gtagccactg accggaagct ggagccatcc tacgccttcc ctcagctctg
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<210> 3530

<211> 4455

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3)...(2947)

<223> similar to gi505100 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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                                                                      120
ttggaaactc tttgggaaag ccactcgaaa agggtatatt tacttctggc acatgggaag
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agaaatcaga tgaaatttcc tttgctgact tcaagttctc agtcactcat cattatcttg
                                                                      240
tacaagagtc cactgataaa gaaggaaagg atgagttatt agaggatgtt gttccacaat
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ctatgcaaga tttgctgggt atgaataatg actttcctcc aagagcacat tgcctggtaa
                                                                      360
gatggtatgg gctacgtgag ttcgtggtga ttgcccctgc tgcacacagt gacgctgttc
                                                                      420
tcagcgaatc taagtgcaac cttcttctga gttctgtttc tattgccttg ggaaacactg
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gctgtcaggt gccactcttt gtgcaaattc accacaaatg gcgaagaatg tatgtaggag
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aatgtcaagg tcctggtgta cgaactgatt tcgaaatggt tcatcttaga aaagtgccaa
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atcagtacac tcacttatca ggtctgctgg atatcttcaa atcaaagatt ggatgtcctt
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taactccatt gcctccagtt agtattgcta ttcgatttac ctatgtactt caagattggc
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                                                                      780
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gaggettgga gtttggcaag ttaccatttg gtgcctgcga agatectatt agtgaactec 840 atttagctac tacatggcac tcatctgacc gaagggatca ttgtggataa tgatgtttat 900 tctgatttgg atcctattca agctccacat tggtctgtta gagttcgaaa agctgagaat 960 cctcagtgtt tgctaggtga ttttgtcact gaatttttta aaatttgccg tcgaaaggag 1020 tcaactgatg agattcttgg acgatctgca tttgaggaag aaggcaaaga aactgctgat 1080 ataactcatg ctttgtcaaa attgacagag ccggcatcag ttccaattca taaattatca 1140 gtttcaaata tggtacacac tgcaaagaag aaaatccgaa aacacagagg tgtagaggag 1200 tcaccgctaa ataatgatgt tcttaatact attctcctgt tcttattccc tgatgctgtt 1260 tctgagaaac cattagatgg aactacttca acagataata ataatcctcc atcagagagt 1320 gaagactata atctctacaa tcagttcaag tctgcaccat ctgacagttt aacatacaaa 1380 ctggctttgt gtctctgtat gatcaatttt taccatggag ggttgaaagg agtggcacac 1440 ctctggcagg aatttgttct tgaaatgcgt ttccgatggg aaaacaactt tctgattcca 1500 ggattagcaa gtggaccccc agatctgagg tgttgtttac tgcatcagaa actacagatg 1560 ttaaattgtt gtattgaaag aaagaaggca cgtgatgagg ggaaaaagac aagtgcttca 1620 gatgtcacta atatatatcc aggggatgct ggaaaagcag gagaccagtt ggtgccagat 1680 aatctaaaag aaacagataa ggaaaaggga gaggtaggaa aatcttggga ttcctggagt 1740 gacagcgaag aagaattttt tgaatgccta agtgatactg aagaacttaa aggaaatgga 1800 caagagagtg gcaagaaagg aggacctaag gagatggcaa atttaaggcc ggaaggacgg 1860 ctctatcagc atgggaaact tacactgctg cataatggag aacctctcta cattccagta 1920 acccaggaac cagcacctat gacagaagat ctgctagaag agcagtctga agttttagct 1980 aaattaggta catcggcaga gggggctcac cttcgagcac gcatgcagag tgcctgtctg 2040 ctctcagata tggagtcttt taaggcagct aatccaggtt gctccctgga agattttgtg 2100 aggtggtatt caccccggga ttatattgaa gaggaggtga ttgatgaaaa gggcaatgtg 2160 gtgctgaaag gagaactgag tgcccggatg aagattccaa gcaatatgtg ggtagaagcc 2220 tgggaaacag ctaagccaat tcctgctaga aggcaaagga gactcttcga tgatacacgg 2280 gaagcagaaa aggtgctgca ctatctggca atccagaaac ctgcagacct tgctcggcac 2340 ctgttacctt gtgtgattca tgcagctgta ctcaaggtaa aggaagaaga aagtctcgaa 2400 aacatttctt cagttaagaa gatcataaag cagataatat cccattccag taaagttttg 2460 cacttcccca atccagaaga caagaaattg gaagaaatca ttcaccagat tactaatgtg 2520 gaagctctca ttgccagagc tcggtcacta aaagccaagt ttggaactga gaaatgtgaa 2580 caggaggagg aaaaggaaga tcttgaaagg tttgtgagtt gcctgctgga gcagcctgaa 2640 gtgttagtca ccggtgcagg aagaggacat gctggcagga tcattcacaa gctgtttgtg 2700 aatgcccaga gggctgcagc tatgactcca ccagaggagg aattgaagag aatgggctcc 2760 ccagaggaaa gaaggcagaa ctccgtgtca gacttcccac ccctgctgg ccgggaattc 2820 attttgcgca ccactgtgcc gcgccctgct ccctactcca aagctctgcc tcagcggatg 2880 tacagtgttc tcaccaaaga ggactttaga cttgcaggtg ccttttcatc agatacttcc 2940 ttcttctgat tcttctagca ttactcgttg gtggcttcag agacagtgct gcctcctcct 3000 gagggaggga aggtaccagg gagaacctgg gaggtcctgg agagggccct gtccagttgg 3060 gtgatcagga atcaaaccag catcggaaag acttcccagc accaagcttg agctgtgtcg 3120 tttcgtggag ggggcagcga ggatgggctt gagctgttga gagatttctg ccctagagat 3180 ggcctttgta tatggggggg tggtgggggg acacaaacac atcagacact ccgtcctcac 3240 actggcagga cggtgttcat cgcattctct tctgtgacca gcctctaggc tagcggctgc 3300 attcgtggtc tgtgcaaaca cttcgtggtt ctatatatca gcagcaagtg tgcaaaataa 3360 aggacctgtt aactcagatt tctggatatt ttggtggtag cttctagtcc cagaatctgt 3420 gtttttaaaa tactacatga cattctgtct attcaatcac ctggtggtca tctttcttgt 3480 actaattaac tgttgatgag cattttggat attctaggag aaagcctata atttcacata 3540 gtttctcttt ttcatgtaac tgtaacctaa atgtattact tctgataaaa ctatatatca 3600 aatgtcactg caaattagtt ttatatctgt catgtgagat ttgtcttact tattttctt 3660 ttggttgcca tggaagttat ggccctgaaa atcgtctccc tccccttctc ttgctgtaca 3720 gcatgcgttc tctttttgtg gttgctggct gggtactgta tttaatgaag tagagaatag 3780 cacttgcaaa aatacagtct tggtacctag agactgtcat gcagatagta taatttggta 3840 tatgtgctaa tgcattgagt agaggattat tttaacacac tattttgctt ttgtatttta 3900 gttaaaataa tcgatgggga tgtgtagccc ccccgtgtga ggatgacatc accacatttc 3960 tagtttcatg gagetcaaga tgtettgtgt etgtgtgget agatggeete tgettggtaa 4020 tcttattttt aggcctaaaa ttcccactta aatccaaagt aaaaatggtt atactgaagc 4080 ataaaccttg cctgtgtaat tttaaaaaat taatagagct gtgcaaaccc tgttattttt 4140 gtaaaaaaaa aaaaaataca tatctatata taatatgtgt gtgtgtgtga catatgcaca 4200

```
cgtctctgtg tatgtgaagt aggggaggcc ctgggggatg acctcccagc ctttatgaat 4260 cttttctcta tgctgctgga cttcattctt actggtcacg cgatgcaggc ggcctgaggc 4320 cagtgctgta ccaagtagaa gacggttcct aaggacagag tttgtctgtt ttctaacaaa 4380 gaaaaattct acaaaggagt ggttaaagtt acaaaggcat tgtgaatcta ataaaaggaa 4440 aggtgtcgct taaaa 4455
```

```
<210> 3531
<211> 2004
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(988)

<223> similar to gi3127193 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3531 agtccagcgg ggaattcggc ctgcaagcct ctgatataat gtggaccata tcagacacag 60 gttggatact gatcatcttg tgctcactta tggaaccttg ggcattagga gcatgcacat 120 ttgttcatct cttgccaaag tttgacccac tggttattct aaagacactc tccagttatc 180 caatcaagag tatgatgggt gccccattg tttaccggat gttgctacag caggatcttt 240 ccagttacaa gttcccccat ctacagaact gcctcgctgg aggggagtcc cttcttccag 300 aaactctgga gaactggagg gcccagacag gactggacat ccgagaattc tatggccaga 360 cagaaacggg attaacttgc atggtttcca agacaatgaa aatcaaacca ggatacatgg 420 gaacggctgc ttcctgttat gatgtacaga tcatagatga taagggcaac gtcctgcccc 480 ccggcacaga aggagacatt ggcatcaggg tcaaacccat caggcctata ggcatcttct 540 ctggctatgt ggacaatccc gacaagacag cagccaacat tcgaggagac ttttggctcc 600 ttggagaccg gggaatcaaa gatgaagatg ggtatttcca gtttatggga cgggcagatg 660 atatcattaa ctccagcggg taccggattg gaccctcgga ggtagagaat gcactgatgg 720 agcaccctgc tgtggttgag acggctgtga tcagcagccc agaccccgtc cgaggagagg 780 tggtgaaggc atttgtgata ctggccttgc agttcctatc ccatgaccca gaacagctca 840 ccaaggaget geageageat gtgaagteag tgacageeee atacaagtae ccaagaaaga 900 tagagtttgt cttgaacctg cccaagactg tcacagggaa aattcaacga gcccaagctt 960 cgagacaagg agtggaagat gtccggaaaa gccccgtgcg cagtgagaca tctaagagac 1020 attcatttgg attcccctct tctttctctt tcttttccct ttgggccctt ggctttgcct 1080 atggatggat atggagattc tttatgggaa gaacatgaat ataagttttg tcttgccttg 1140 gttattagca caaaacttta ccatgttaga tgttgaaaga agaaagggaa ggaatgagag 1200 agagtgaaaa ggagagggta acagaaaaaa aggaaagaaa agtaagtcag ggaaatatta 1260 aaactgcaag ggaaagcaat tgaaaaagaa ataaagtagg gaaagaagga gagaggaagc 1320 aagggaagga ggaagaaagg aaagaggaga tgaaaggggg agaaaagata gaagaaaaat 1380 aattgaaggg agaatcagaa aaataaagag aagaaaggaa agaaataaag agagaaagag 1440 aaagaagaaa gagcaaaaga acacaagaaa gaaagagagg gagaaagaga gggagaaagg 1500 gagagaaaaa aattgtaaaa ataaaaatag taaaagaaac tgataaagaa aagtaatgga 1560 agacaggaag aaaagaagag aaggaagtaa agaggaaaac ttataaatat tcccacagat 1620 agacaaagtc aagcataaaa ctggagcttg agaaggaaat gaaaggccgt ggcaccttct 1680 tataccctag aagaagacct ccatacagga agacttgtgt gtggggttgg gacattagaa 1740 tcatccacaa gtcaccccaa accttggaac tgtcagggtc agaggggaac caccatttat 1800 taagcatttg ccatgtgcca ggcactaacc cagatgcatt ataaatacca cgttgtttca 1860 cctgtgtgtg gcatctacag accttagatc atagctgtga gaacaacgta agcactgcca 1920

```
<210> 3532
<211> 4490
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4493)...(772)

<223> similar to gi4240307 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3532 ttttttttt ttggtgcagc gatgtttaat ggcaattcgt ataaaccaag cccatgcaca 60 agtagaaagt gcccgtggag ccggcaggag gcccccgccg cgctagagaa ccacaagccc 120 ggccgtgcag ccctccccgc ggcgccttaa atagattctt cactatactc tqtatqttac 180 agtatgtaca agacccctcc cctcggggga cggggcggac tccgcaacgc gttcctatgt 240 acaccacctc cccttcggcc ctgaggtcag tggccagagt cgggtgatgg ggtaagacag 300 ggccagagag ggaggaaaca gacgcaaaca tgcggagtcg ggtggggaca cggtcagccc 360 tgaaacacga ggggcgtgcg cagcgaaggc agtggtggga accgaggcgg atacattcag 420 agacgcgtcg aacaaataaa taaggcaagt caggaggggg ccgagtcggg tgcaggcagg 480 aggagctggg gagcaggggc aggcagggct ccggaggtca cagcggaaga tgcaggtatg 540 tggggcgcgg gttttctgga gccaggacca aaagagacgg ggcacgacca ggagggacga 600 ggagagggt gtgggagcaa ggcgtgggga ggagggagga ggcctacaga gggctccaac 660 aaaggtgaac aggaaagctg ccgacagggg ctccccctgc cccagaaagc cctctccctg 720 ttaagactgc acgaggcgcc cccagggtgg tgagaaaggc ggtggccagg tcatgtggcc 780 agtcccggct ggggaagccc ttccagctcc tggttctgct tcagttccct catcctgtgt 840 cggcagcgcc gcaggaatct catgatcttc cgggctgcct ggtcctgctt cttggtgaga 900 aaggagcctt tgttgcgggc aggcagggtg gccgaagtcc ggtggggagg gccgggcctg 960 eggeggtagg ageggtagtg etgetggatg ageacageeg eteggegget etgetgaaat 1020 cgcttctgtt catagtagct tcggaacttg ctctggatca ggatggccgc ctgggtcatc 1080 ttcttataga gtgcaaactt aagtgcaatc caggtcagct gcttgtactt ccgqtaacag 1140 cgctggatta cagctgctgc tacctcctgc tgctccttca gccgccggcc cttgtacttt 1200 cggaaggccg tctggatgac tcgggcagcc tcatacagtt cccqctqctc ttgaatctga 1260 ataatgtcaa caaggcaaaa atcaactttc caatcttgcc cactggtgga atgcagagag 1320 aaactctgcc caggagggtg ctgtaaggga caagcccagg cgacctccgc tcaaagggca 1380 aqttcqctgg gaggggttga gctggggaaa tggtccacat tctcccaggt agctggccag 1440 ccaggacatg gtctcactga gccccacagc ccctgtccgc tcccqcattq aqqctccaqc 1500 ctcgggcagc cccacgaagt cctctcgttt aatccgctcc ggtgtggctt cgatgatctg 1560 cttggctagt gagatcatgt ccaccgggat cacatccaca gcctgtgggc tgtcagcgtc 1620 ctccggagca gccccatcat ctgaagctgg tgggagggca ggaagggagg agaggggcc 1680 cttggagttg gtagcctcat agtccatgag gagtaggggg gcttctggga caccagagga 1740 aagctggcct ggggccatgt cctccatagt catctcagag gctggcagag gtgcagggg 1800 1860 ctccgagggc gaggagacgc tgctcagacc agtgtctggg ctggaggagg gtggcgatag 1920 ggcaaatggg ggctccaccg aaggctcctg tctctgtagt tcctcaaggc agcgggcaag 1980 gcgcacatga ccccgggaat gagccacaga caatggcaga cggcccagag agtcgggaat 2040 gctcagtgcc tgtcggttcc aacggaaaag gagcacagca gcttccaggt gtcccagggc 2100

```
acaagcccac atcagagggg tgcaagagaa atgatccacg ttgagcgggt caacctcctg
                                                                     2160
ctctaagtcc aagcttccag tctccacact ccgccactgg ctcagggtct cgatgaggcg
                                                                     2220
ggcatagccc tgggcagcag ccaggtgcag aaggctcatg ccccggaagg ggcttccatg
                                                                     2280
ggccagacgt tcaggaccct tccaggtgga gcgtgggatc atgctttcta ccaaqaccac
                                                                     2340
tacccgtgct tcgaacccag gcccctggcc ttcatcctga actggaggag catcaggacc
                                                                     2400
ctggcaaggc acctgcccag ctgctgcgat ctctgccatc cgcttctcca tctqctccag
                                                                     2460
tcgctctagt atggacatcc ggaactggtt gtcgtccagt gacagccagt caagttgagt
                                                                     2520
actaggcaga gacaggaatc ggcgggctcg atactcaaag agcacagaag cagaaagggg
                                                                     2580
cccctcccgc cctgccacct gcaaagacac cagccctacc tcatgggcgg gacagtagca
                                                                     2640
gcgtaagaca ccaggctgga caagtgaggc tggcactgcg atgtgatcaa agacacagga
                                                                     2700
gtaatgeteg geggettegg tecaaggace tgtgatgage acettgacee caccetetgg
                                                                     2760
gtaggaccac tctggggaga agtctgtgat ggtgctaaga gcaggagaca gctggggggt
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tgaaagactg aagggeteea gtteaetgge eecaaeaggt eeteeaaaea aggeetetee
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tgaaggtatg ggtggggcag ccccgtgacc cttgagctcc tccccactgt catcatcttg
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gatgaagaag cagtttcctc ttctcccacc tgctactgac tgtggtgggg gaccccgagc
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                                                                     3180
ctctgcctcg gggaagtctg ggcttactcc ctqcccccct ccatatqtct qqcccctctg
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ggggctgttg agaaaacgat cagggtcaaa ggcaggactg ggaggagctg gtggggcaga
                                                                     3300
aggctcagtg cctacaacca ctgccaaact catggaaggc ctaggatcag cctgtggagc
                                                                     3360
caagtgcctg gtgggcgtca agcctccagc ccgctgctcc agtcctgtca ggaggaggat
                                                                     3420
agcagtgcct cctcttgaag aaccccctcg agaagtggga gggctaggtc tgatttctag
                                                                     3480
gggctctgca aaacctgatg aggaggaaga agaggaagaa gatggggagg tgtgtgcctt
                                                                     3540
ggggagctct gggggaagtg gggctatcag tggaggaggc tctggggggt gagggtgggg
                                                                     3600
gatagaggtc agggttaaag ctcggggctc cactttggga gagatgatgc ggtgtttcgt
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gctgctgcat ttgtgggtaa ggctcccaga accaagcccc ccactgcaga gacaggcgtg
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ggttcgggga gcaggcttgg ttgggtgggt gtccaaaatc tgctgcacca ggtqttctac
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agagaactct tctgttccat tcccgcagct ccacttgatg ccatgaaaca tgggcttcag
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ctgtcccaac aactcctccc gggaccactt cagccactct cgacggtcgc tgctgatgga
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acaaaagatg gggctgcagc cctttccaca gtcctccagg gctgggacgt tcaggtagtg
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cacaaggacg atgtcagggt tctggagcag ccagtagcag cgccgatgga atgtggggac
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gatggaagag tgaacgtagc agccatagag acactccatg ccctggacct tcagcttcat
                                                                     4080
gtggtcctct cgggtggtct tcccatcctt ccgcttcttc cagaggtaac catccttccg
                                                                     4140
atatttcacc ttcttgcgat tgtagaggat gatggagcca ttctgaggcc ttgtctttgg
                                                                     4200
ggcacaagac agccactcat catgcttctc aaaggtgatc aggtaggatg caatctcctc
                                                                    4260
atttgtattc caccgtagcc tctctggagg cagcagggg cagcgaggaa gacactccag
                                                                     4320
cagcttcttg gggagaaaga tcttcaggtg gtggctgttt tcagcaacct cggtggtgtc
                                                                     4380
cttggtattc atggtgaggg ctccaggggg caaggtcacc cccggcctga ggggccgggg
                                                                     4440
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                                                                     4490
```

```
<210> 3533

<211> 2333

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2304)...(712)

<223> similar to gi1694688 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

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<400> 3533
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                                                                       60
agataccaca gcagaagaaa aacgtcttgc aagaaaagac ttcatggttt acaacgatca
                                                                      120
aatgtatggg ctatttgcct gattggtggc ctggactcag caagagattc ctttgcaqca
                                                                      180
gaggttggcc acacatctgg gggctgcaac accactgaaa agacagcttt ctaagcatta
                                                                      240
qtqtaaggca aaaagcagag tgcctaaact tggccatttc caccaagaaa aaaagtttca
                                                                      300
tagcaacctt ccttcaccag aaaggcttac tttatgatat gctaacagaa cagaaaagca
                                                                      360
ggttgggaca agatacagac tttgttgcat ttagctatga cccttctctc ccctctgtgg
                                                                      420
atgtgggcag ggtggggaga ggcaggaaga ggcagtagag ggaaatgaca tttgcactca
                                                                      480
ggcttcccgc ccctacccac ccctaccctt cgcccagaca gacgtcggat ctatgctgca
                                                                      540
ccaggggtgg gtcatggagt ccagctaatt gccaggagct gaggcgtgta caagccatga
                                                                      600
aaagagetge eccaeggeet ecceacatea etgteettea tgeaettgea tetttaagge
                                                                      660
tgccagcttc agagctccct ggacattccc tggccaagtg tcatccctgt gtcaaatgga
                                                                      720
tgggatgcca ggtaatcctt gtactccccg tcaatcagtt tggcggcatt gttcctggca
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aaccagcagt ctatctgctc ttccccgttg taaatcttcc tttgcttcca gaccactggg
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acttggtggc ctttcactgt taggacqqcc tcaqqcccct ctcccacctq aaggagcaga
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gggtgagtga ggttctggct gggccctqca gggtcttctq tgagtctggc atcctgattc
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aggaactgac ccagcagtcc gtggcagttg ctggaaaggc cctcgctgtt ggcaatgtag
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aaacccaggt ggtgtcgctg gaagggcgcc ggctttttgt agaggtggat gaggatgaca
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aaggctatgg agccctggat ggtgacggtg acattggcgt tggcagacac ggacacctcc
                                                                     1140
agcccccage tececaceae caeactetgg ttgcagggga geaceagtet gteeceacea
                                                                     1200
tccaagatga ctctgctcgg tgtgatctcg agataagatc tctctggctt gttgatgagg
                                                                     1260
atggtgatag tgcgcaagta agtgcgctgt ttcttgtggc catttggagg ggcgggtgcc
                                                                     1320
ccaattaact ctccgttcac tgtgacacca gagtccctqt gatcagagac cagcctgagg
                                                                     1380
atgtccccgg gctgcccatc aatgttgaag cacacggtga gtctgctcag ggggaaatcc
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acaacaaagt ggggatcacc atccactgat gttttagaga ttttaattct tggctggtat
                                                                     1500
ggcttcttga gcaaaggtcc tggctgcgtg ccagctcctc gcacgctctq caccaccggt
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tegggteeca tggeageega catgeegtgg geeteeteea ggeeateeat gegtgggaee
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ggccccctca gcttcatgga ggtgaaggga gtgaggaagc ggtagctcac agccagggcc
                                                                     1680
tgggcccgct gccgcagccg ctccttctcc ggttcatcgt cactttgcag ccaggagctc
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agcagctcct ttgtggtgag gtagctccag agacgctcga tgtggttggt gtcccctct
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ccatcgcctc caggcctggg gcttcctgtg acatctttcc ctgccttctg aggccgcaca
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ggcacatctg tetteaggat gatgaattte ttactgttge tggcqqtgae etceacqtqe
                                                                     1920
aggtgatcca gcttcctgtc caccagcttc cccgcaatga tgatctccga gccgttgaag
                                                                     1980
tagttgggga acagggtctt ggtggcctgc accactgagc tggggggata atcgatgcgg
                                                                     2040
atgtcagaga ggagcggggt cctgatttca tcgtagaacc cgatgagctg cgagcctgcg
                                                                     2100
tectectect egtgeaegeg cegtgtgagg ceaeagttet ceagegacag tttetecage
                                                                     2160
agcctgaagt ccacgtcgtt gccgatgcca atggtgaaga tgcagacttg gcctcgggcg
                                                                     2220
gcctctcggg tgttgttgag gatcttgagg gtgtgcgtct ccccgaccgt gggcttgcct
                                                                    2280
tccgtcagga agacgatgag ggacacgctc cggtctcccg tacgcgtggg cga
                                                                     2333
```

```
<210> 3534
<211> 2313
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2311)...(1475)
<223> similar to gi4589652 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3534
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caagtagcca tggaattaat tctgtgtggt aagaggcaca cagacagatg atgagcagct
                                                                    120
cttctcctta aagaagtctg tgtctaattc ctacgcgtgg ccgttgtcag agtatagctc
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tttcccgtta cctttactag ccagaaacag cttgcttgct ttctgaagaa aqaqaaatqa
                                                                    240
cgcaccacag ggtacatcag atgaatcaga aattacattg tttggacttc aaaacagtgt
                                                                    300
ttactgactc tgggcttaaa cttctagtcc actcctagaa cagaaaccct caaagttcaa
                                                                    360
gagtgttttt ttttgtacaa ttgtttatac aaattcaaca aaggtaaaat cgcatcaggg
                                                                    420
aaggtctagg aaacaccacc ttacaacaat ggcacttata aatgcagaac tttacaacta
                                                                    480
540
aaaagcaaaa gaaaggctat gtgggagcat ttattctacg tcttgactca ctgtataaat
                                                                    600
tagatctatg taagtacaag agctcatgct ggagcagaac ctcctgagtg caaaggctga
                                                                    660
agtcgaaatt ttaaaatttg agaaaagtga attctctaca gaggaaactt ggcagagtat
                                                                    720
cttactttga ctataattta catttatcca caacatgctc atgtaactct tgaggtacaa
                                                                    780
agcagactct caacttccag ttaaacatgc ttttaagtgg aaggtcttag cctactttgt
                                                                    840
tagatctggg cacatttgta gatgggttgt gtcgatgaag tacacgttaa attctctcct
                                                                    900
accttaagga aatcaggaaa attggcaatc tcaaaacaat aaaaacactg gtatgcattc
                                                                    960
aaaccttgca taaataactt ttaaacaatt tgtacaaaaa tagttctgca taatgtaaga
                                                                   1020
tgtaacaaaa ccaaccaaac aaaaaaagt gtcaagacgg cagcagatgt ggtgtgtgt
                                                                   1080
ccactttatg tcaacaccca aaacctcggt gttgcaagga atgaagtgtc caaaacacca
                                                                   1140
ctaccactaa cagaaactcc taagctcatg cttcagtatg agaatttctc cgaagtccac
                                                                   1200
cctcctctcc gacaggaatg tcttcttgta aaggccgcct tagaaatggt ccagaaagca
                                                                   1260
gtgcagttac gattcagaaa gaccaaagga aagtgtcggc tcactcatcc cccaaacggg
                                                                   1320
tgqttgaaca gcttctccct tggaaagact tgcaaaatgg aattgcgttg tggtctgttg
                                                                   1380
tcccacgttc caaatggaaa ataaaagccc tcatttttgt aaagtctctc ccctcccaga
                                                                   1440
gcccgccccg tatttacata cttatccttg gactaactca gtttttgcag gagttttct
                                                                   1500
tctaacttgc ccaaactgga cactcacaga catctcggct atgaactgct cacagccttc
                                                                   1560
cttggtgact tgcttgcagt acctcaggtc aatatgacag atgtttccac agcgtttgaa
                                                                   1620
gaaggacagg cactgatcag tgaccttatt gcagtcagac aggttgatct cggttaagga
                                                                   1680
gtctcgggtg gtggtgccaa cagcagtgag caggttgata gactggtcgg tgacgtggtt
                                                                   1740
acagtaactg aggtggagct tggagagcag gggcatgtgg cggatgatga gccgcaggga
                                                                   1800
ggcatctgtg atgtccaggc ctgccaggcg cagctccacg atgttccgga gcttgctccg
                                                                   1860
attgtccatc tgacctggcc tgttgtctgt gggcggggac aggagatccc gcatctgggc
                                                                   1920
atcctttagt ccctccaccc actggacatc cagggtccgg agcagcggac aactggagct
                                                                   1980
gcaaagggcc gagaccgcga tccatgagca gcctgacagc accaagtccc ggagcccagg
                                                                   2040
cagccggttg atgagccagc tcagctgctt cttggagata ttggtccagc tgaggtcgag
                                                                   2100
ggagacgggc tgtcgccgga tgatgccact cagcatcagg ggtgtgatag acttgcagtg
                                                                   2160
gttcaggtca atgcgggtcc acaaccgctt atcgcagcac cagcggttcc aggtcctgca
                                                                   2220
gacccgcatg cacacaca ggtcttggtg gctgaggtag ctgaagacgg ccatccacac
                                                                   2280
ctccctgtgc atgacgtggg ctgccccatc gtc
                                                                   2313
```

```
<210> 3535
<211> 1319
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (251)...(734)
```

<223> similar to gi540535 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3535
gggcgttccc gactccggca agagggtggc gcctggactc tcqccctcaq aqqqaqqccc
                                                                       60
gtcccacggt ctgtggctac ggatcccagg accetettcg cgggcgattc gcgtagcetc
                                                                      120
aggtaactgc atcctgccca gcatgacggc cccctgcccg ccgccacctt cagaccccca
                                                                      180
gtttgtcctc cgaggcaccc agtcaccggt gcatgcgctg cacttctgcg aaggagccca
                                                                      240
ggctcagggg cgcccgctcc tcttctcagg gtctcagagt ggcctggtac acatctggag
                                                                      300
cctgcagacg cggagagcgg ttaccaccct ggatggccac ggcggccaqt gtqtqacctq
                                                                      360
gctgcagacg ctgccccagg ggcgccagct cctcagtcag ggccgggacc tgaagctgtg
                                                                      420
cctgtgggac ctcgcggagg gcaggagcgc tgtcgtggac tccqtqtqct tqqaqaqtqt
                                                                      480
gggcttctgc cggagcagca tcctggccgg gggccagcca cgctggacgc ttgccgtgcc
                                                                      540
agggaggggc agcgacggag gttcagattc tggagatgcc ctccaagacg tcagtgtgcg
                                                                      600
ccctgaagcc gaaggcagat gccaagctgg gcatqcccat gtgcctgcgg ctgtggcagg
                                                                      660
ccgactgcag ctcccgccca ctccttctgg ccggctatga ggatggatcg gtggtcctgt
                                                                      720
gggacgtctc tgagcagaag gtgtgcagcc gcatcgcctg ccatgaggag cccgtcatgg
                                                                      780
accttgactt tgactcccag aaggccaggg gcatctcaag ctccgcgggg aaggcgctgg
                                                                      840
ctgtctggag cctggacggg cagcaggccc tgcaggtgcg tgggactcat gaactcacca
                                                                      900
atcccgggat cgccgaggtc acqatccqgc cagatcqcaa gatcctggcc accgcaggct
                                                                      960
gggaccaccg catccgcgtg ttccactggc ggacgatgca gccactggcc gtgctggcct
                                                                     1020
tecacagege egetgtecag tgegtggeet teacegeega tggettgetg geegeggget
                                                                     1080
ccaaggatca gcggatcagc ctctggtcac tctacccacg cgcatgactc acccactccc
                                                                     1140
ttcccgggag acgaggaggg cgggcaggga ggtgggcatc aggccccagc cttgqcctga
                                                                     1200
aacctcaagg gcctctgagg accagcaagt catggcccaa ggaccatgga gtccccgctg
                                                                     1260
tcttcatgag atcagactgc acaaatgtcc agtgtctgaa ccgcatggaa gggcaggat
                                                                     1319
     <210> 3536
     <211> 2304
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2290)...(1254)
     <223> similar to gi3403236 in the genepept database release 114.
       Run with FASTXY 3.3t00, default parameters
     <400> 3536
tttttttttt ttttaatggg gtttttcttt taataagggt ttttactcaa aagtgtagct
                                                                       60
ttgaaaatct ctagcttgtt gtgaaaacca ggaaagccaa ggagctgcct cacactgcac
                                                                      120
accaccacgt gtaagetgtg ggccgctgtg gtgtttgcaa actctccatt accaaggctg
                                                                      180
gaatcaaatg caccacttta aaatcagagc caacatttta aatttaggag gatgatgcat
                                                                      240
gtcctacttt tgattcaagg agaaaggaca agttcttagg tacaggtaaa acaaaacaca
                                                                      300
aaagtaaaca aatctttaga aatcactata tatatgtgtg tttatatata tatttttata
                                                                      360
taattaggat tatcatcatt tcaaactatt aaaaataagg ttgccacctt accttttctt
                                                                      420
ttggtaatgg ggtgttattt tttttaagag aaaaaaccaa acattttgcc cagactctag
                                                                      480
```

```
agtttcccaa cttcaattct gttttctgct gtgcaacttc cccaccttca cgctgtatcc
                                                                      540
ccaagtcccg ccaccaattc tggctggcag gaggcagagc aagctttcat tctggtcatc
                                                                      600
aagatgacag gcccacaaaa gtacagctga gacgggaact gaattettee ccaggaagaa
                                                                      660
aatacctata cccacaatag gtctgcaaaa tctcccacag gcacctcttc tccctttctt
                                                                      720
gtggttgttt gttaattggt ttgttttgcc taaaagcaag atggcaatct taatcaaaaa
                                                                      780
gggaagctag atttttaaaa taacttaaaa aaaccatttt tatataaagc agcaaaaaca
                                                                      840
tatcttcctc tctgcagaaa gaaaaatgtt aacaaggaaa cacagcgatg tgaacggact
                                                                      900
gtccgtcaac tcctgctcca ctggatcccc catccagctt cacctcgagc tactccttaa
                                                                      960
ctccagcagt gctgtctgaa gaagatcctt tggcgtcttc aactgctctt ttactttctt
                                                                     1020
gattgagact ttcattttcg gacctggtcc cattagggat agagttttca ccgtttacaa
                                                                     1080
gcccgttttc tgtggccttt gctttgctga ttgcctctct gatgttcaag gcatcctgca
                                                                     1140
ctccagcctc ctcctcgagg tttctcaaga ccagggggag cctcgagtcc cccacgctgc
                                                                     1200
tctccaacag cccaaggtta ctctcttcat atttgggaag cggagccttt tcctccatct
                                                                     1260
gttggcgata gtattcccgg ttgacagctg cactctttac tgctttttcc aaaatctctt
                                                                     1320
tctcacctaa gcgcaatttg atggccattt ttgcacgaac agaaagatcg tggttttca
                                                                     1380
agacggattt atcttcctca atagttgttt tatatgtttt taaaagaagt gaggctctat
                                                                     1440
cttcaagaaa tgtccaaagt ttgacctcgt tgtcccagct aacaggaaat tccgagttcc
                                                                     1500
ccaaggtgaa gattctatca atagcgctgt ctcccagcaa gtgttctttc agttcttctt
                                                                     1560
cagtcataca gaatactcgg agaaaagcca aaagctgagc agagatgggc ggctcggtaa
                                                                     1620
aatgcaatgc aaaaacactg gaagtgggga tgccggcacg agccaagacc tcggccttca
                                                                     1680
tggcgtagag tctgtcactt ttactcactc caagctttat tttcactctg tcgtgtgagt
                                                                     1740
tattgtcaaa gaaaaaacca ctgtggatca caaactctgc gttggatcga gtgccataaa
                                                                     1800
aaatgtaaat ctgctctcca gcccgaaaat cctgcagagc cacacactca cagcggtcat
                                                                     1860
cttccaggtt gtaaccagta gtgatcaggc cgttggtgtg gttacacata tcccataaag
                                                                     1920
gaatcagage cagggtcacg cgggaaccat cctctgtggg aatttggttt tgcctcgtca
                                                                    1980
taacagaaga gactgcccac ctgtagtcct cgtaagtgaa agaatccttc aagggtagtt
                                                                     2040
tgttggcatg aggatgggtc tggatgactt tatagaagta ggcgtactgt cgagctgtgt
                                                                     2100
ttttatactg gctgaagaca tcatgtatag cttgtgtgga ctgaagatac cgaacttcat
                                                                     2160
cttcttcaaa gtagagagga gtgtcatatt ccctggggag ggtttgaata tagggctgcc
                                                                     2220
agaaggagtt agggctggct cgctccccca gcaaatgaaa ggccagtgcg atgtttccca
                                                                     2280
tggcttgaag gattcggtct tgag
                                                                     2304
```

```
<210> 3537
<211> 5048
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5049)...(1236)
<223> similar to gi3947690 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3537

ttttttttt tttaagatgga gtctcactct gttgcccagg ctggagtgga gtgattggag 60

tgatgcggtc tcggctcact gcaacgtccg cctctcaggt tcaagcaatt ctcctgtctc 120
agtctcctga gaagctgcga ttacaggcgc ctgccaccac gctcggctat tttttcgtat 180
ttttagtaga gatgggttt caccatgttg gccagcctgg tctcaaactc ctgacctcaa 240
gtcatctgcc caccttggcc tccccaagcg ctgggattac aggcgtgagc caccgcgcct 300
ggcctgattc atatatata ctaactgaaa tgcagtatca ctgcacttcc ccaattagta 360
```

aattcaatac atcctgtatg taaaaaaacc caccaatccc cacaaaaaac caatcaaaca 420 aaaaccccaa aaaaatcacc aaaccatact gtcaagcgaa atagttttaa ttagtaggct 480 gatcataaat aaatctacat aaaagattta acagaattac aaagagtttt gtgttccttt 540 gtggactcaa ttcataatat gcattagtca acctcattct ctaactgtga caaaaagagt 600 tgtcatccaa caatgcagca cagtttaagc aattcatatg ctatagttac atttttacat 660 tttctttaca aatgtaacat ttatgtacat tatatataga tttttttcta tagttcatgt 720 actgaaactc tattgttttt acagagaaaa tgttgaattc atttaatgaa taagaaacat 780 tccttgttaa aaagtaattc atataaacaa ataacacggt accaatgcct tttggcatct 840 cttgccagag ttcaagtcca gaaatgttat attaattata agaaaaaaga atttatctaa 900 ttttacatta tgacatatca ttccacatag ctacataaat ttgccagctt gcaatgaaca 960 gagcactgta ctgccatact actggaaatg tgtagaaacc aattcaaaat atacttqqtq 1020 aaacagcatc atcgttacca ttaatttgag ttgaaaaaga tctgtcaagt tctttcttcc 1080 cctttacttt ttaccaaagc ctcagacaga gtgctgtgcg ttgcatcttg tattaacaaa 1140 tgccttcatt tcaaatttct cacgcgcttc tctgacagat tatgctttac ctaggttata 1200 gatctttttc ttattcaatt ttattctact tcacttacaa atctgctgct gaacatgaag 1260 caaaaattca tagtaagaaa atgcagcctc tgtccggtct tcaatcaaat gctgaaaaaa 1320 ttctgctttg gcaggactct catcttttac tatgtgaagg attggactta atggtctgct 1380 gtctctaagc caagttatga aggatctggc tctttctgat gaaagtgtat ctagctctgg 1440 aagatgtgtc attttctgtg gtattgatgc aaaattagta tatccaagca catcctctat 1500 gaagttattg tcacagcctt tcccaaccca aatgtaaaaa acagagccac agtccataag 1560 gaaagcacct tetettgtea gettetetge agacaatttt tgaaqaqqtq qetqtqqtae 1620 aatcctgtca ttaacatgta ctgcaccctc atctgtcaat ctgtctatcc tgtataagtt 1680 gggatgaatc attttcatta gatgaacaag tggctgagac tttatctgac acatggcata 1740 tacacgatca tecageegtg tgettgtace egttetaaat getttetgtt tgagaaggge 1800 caaaacatag agaggaaaca acttgaggga gctgggcgcc atcaatgcag agtgctgtaa 1860 atttgagaca gttgagccat atgcagacaa tgagtccact acagcattca ctaaggcatc 1920 tettgcatet gacagaettg atgaaacgga ccgatecaca gccatgtttg ccagaaggca 1980 gatggcagct tgtacatcca ctcccgcata tacatctgat agtgaactta ccactggcaa 2040 acaaagtgta tgtactctaa ttctccgctc acctttgctt gatgtatata atagggctgt 2100 ttgaaaacat actaaggaag tatctgttaa actttcttca attgacaact gcaccgcaaa 2160 tccagcatca ggattgatgt tggcaaggga taacaaatca gtagaacgga caaagaagtt 2220 accgtgaaaa gtgtgcattg aaagaccttt agtacacctt attctcataa cagcttcaaa 2280 cccaattttt cttgtgagat accgttttag gtctttttgt aacttttctg cttgtgaagg 2340 attgtgagta tagtggaatg atggataata atagatgcac cctgcagaat acttggacat 2400 gcaagctaga gaagcaagat cagaatactg tgaacttaaa aggaacaaat ccactgcagt 2460 ttgctgtccc gagcaatcta atgcaagttt cttataaaaa tcagttgcag ggccaagatg 2520 ttgtaccacc tttgtacttg atctctgatt aggatcttct ctggattgca gaagtcctgc 2580 acccaaggaa ggtaactgtg tctgaaatac agacacacgg ccacctgttg gagacattaa 2640 tttaaaggca gcctgaagtg caggaccaag ggcactgtgt gtttctcttg tattggtgaa 2700 catgtttggt aatgcattca gtaagtcttt tataagctct ttactttcat atagattcac 2760 aagtaaacta tccggtgtag gtagaaaaac atcatctata tcagacacaa tcaacatttg 2820 aggctgtgat aatccttcct gggtaaattg tagaaatgaa taggtgctta tcaaaggtca 2880 tgaatcctat tcttggttcg tgaattctcc aggaagcttg tctagatttt tctaggagtg 2940 actggcacca aaaattgtca aatatccagc ttccactgca ttatgagaca catctaaaac 3000 aaacaagtaa actgcaggtt gaggaggacg cagcatgtaa tctgaagaag caatgaactc 3060 cacagttgga attctgaact tctggtcgtt tatgaggctc tccataagat cgggtaaggg 3120 ggttatacat aaattettea ggaacategt ttaetetata geacaaattg catttecate 3180 tacgttgatc aatgaaggat acaaacgggg ttaatatacg ttcgacagga tcggcacctc 3240 acaatggtat ttgatgttat cactggtaat tgcgttaggt ctctgaaggg atgtaacaac 3300 aatcctaaag gaagcttagc tttattcagt aaagcctgtg tctgtggaat atttgtcaaa 3360 gtacaccgaa atgaatctgg gctacagttt aattttttga ggtctgcatt caagttaggt 3420 acaggagece aaacaggagt cataggtaaa atatteetet eetgagtaag gtttacaggt 3480 ctcaggcttt ctggttgtgg agaactctga agactcaatc ctcctatact ggaggatagc 3540 tggttcacac caggatactg ttgaggatac tgctggaatc cagaatatac cgggttactg 3600 gggctgtact ccagaaataa gtggtgctgt agcattctga taaccaggct gaagtgttgg 3660 atagccatag ccaaaggctt agccattttt gaaggctgag ggacgacagg agctggagct 3720 gaagctggag ctggagcaga agcaggatca ggttcagggg cgggatcagg agcaggactg 3780

```
cttgctgatg aagaaagcat atctgggtaa ctgcctcctt ccagggcatc ataactgttg
                                                                     3840
ggcattggag aagcactgct tgtggtagaa gagctgtcaa cacctgcttc ctcatcctcc
                                                                     3900
tecteetett eeteateate ggaagttgat gacaagggag ttggtgegga getagettgg
                                                                     3960
ttattaacat attcaccata ctgcacgcct ttttgttgta atagctctga tggctgtgta
                                                                     4020
actgaggtca caggctcaac tgggtgattt gcagtgggag gtgttcttgt tgatgaggat
                                                                     4080
cctgaggatc ctgataaaac agtggatacc actgggctgg acttgggagg ctgaacattt
                                                                     4140
tgcataacag gacaggataa agaatctgca acagtaatgg ttgggttgtt gttcgctaca
                                                                     4200
gccagggatc ctgtgtggtt tcggatgaga ttgtcttgag tcgatggaag gcctggagat
                                                                     4260
gaccacgtta gagtactgta tcctgaaaga ctttgctgct ggtggtgctg ttgtgatggt
                                                                     4320
agaggtggaa gtggcgatgg atggctgata gctgtatttt gaccagagaa tgaattatct
                                                                     4380
ttaactggcc taacagtcgg agcattctgt gaggtaaaca tttgcccata tgtatcacca
                                                                     4440
gcaggcagag agggatatga aacactagga tacgcggcat tagaaacagt tgacatagca
                                                                     4500
taatgaccac aagtagaggg aaatccctga gacgcaacag aagagctggc agagtacatg
                                                                     4560
gctggactat tgtagtgatt cacaaaagag gagtatggtt gggaggcact cgtatgcaaa
                                                                     4620
tgggatgctg acgatgcagc accttggaaa gatcctagag tggatcccac aatatgaggg
                                                                     4680
gcaggaggac ccctgctgta caactgctgt gctcctggtt gctggttcac tgtgttagga
                                                                     4740
gtcacatttt gtgttggtac tgtatagaga gcagagtagt aatcaccaca ctgggtatcc
                                                                     4800
aatggcaatg aggtcatttt cccaggtcct tgagagtaat gtcctgaggg agcaatatag
                                                                     4860
ttttgatgat gcaatccata tccagatgga acctqcattt gattctgggc tggaccgttc
                                                                     4920
tgctggtgcg gcgccgggcc cgcacccggg cccgcgggcg ctgcggctcc tgagacggcc
                                                                     4980
gatccgccga acttgggcgg gatccgggcg ctggcggccg ggtgaqagga cccqqcqqqq
                                                                     5040
gccgacat
                                                                     5048
```

```
<210> 3538
<211> 606
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (40)...(423)
<223> similar to gi2302524 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3538
ttcagtgctg taagaaagga cggaggctgt tatctatggc agatctatcc aataaaggag
                                                                       60
agaaaggacc gcatacgcct ggttctcatc atatgcaata aagagtttga ccatctgcct
                                                                      120
ccaagaaatg gggctgactt tgccatcatg gagatgaaga agctgcttga ggatctgggt
                                                                      180
tacagtgtgg atgtagaaga gaatctgaca gccaggataa cgtgtccagg agagacagca
                                                                      240
caaggggctc catcttcatc acacaactca tcgcatgctt ccagagatat tcctggcgct
                                                                      300
gccacctaga ggaagtattt tggaaggttc agcaagcatt tgaaagtccg gaggcaacag
                                                                      360
tccaaatgcc caccatagaa cgagtgtcca tgacaagata tttctacctc tttcctgggc
                                                                      420
aactgaaaat ggttaagcat tgagagttgt tggtggtgta tgaaataaat gaaagtgtga
                                                                      480
tattggagca ggaaaccaca agcagcccag ccctcettta tcaacttcaa gaaacacett
                                                                      540
tactagtaca gattgaatgc ttaacatttt gtatttcaat aaaggtgaag acaaatgaaa
                                                                      600
aaaaaa
                                                                      606
```

```
<210> 3539
     <211> 559
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     \langle 222 \rangle (465) \dots (294)
     <223> similar to gi1247386 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3539
ttttttttt ttaccaacaa agcctgcctt tattaaatag agatcgcgtt acattccatc
                                                                        60
caaagaagga aatccggacg tggtgaggga tgcgtccagg tgggagctcc gaacgctggt
                                                                       120
cctgagtggg ctctgatggg tgggagggcc caggtcctgc ctgcccaccc aggccccaca
                                                                       180
tgccagggcg cgtgtctgca tggccaccca cagctgaaaa caggcgtggg cgatctgaag
                                                                       240
ccctgtctgt gttctactgt ggcagaaagt gccccagtcc ttccagcggt tttgggagca
                                                                       300
ggatggccac aagggggtgc tgctggccca gggcttggca gctggggtgg agggtaccct
                                                                       360
ggagatccag ccacccagaa cagtcccttt ctgaagacaa gccagcaaca aggcacctgc
                                                                       420
aggcagttet ggggaetggg gagggggege tggetgeete aggtgteece teccaaggge
                                                                       480
tgaggccccc cgagtatgga tccgagctcc ctggtctttg gtgctttctt gaaatcctcc
                                                                       540
tggtggtggc agaacccag
                                                                       559
     <210> 3540
     <211> 986
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(987)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (1)...(662)
     <223> similar to gi2959884 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3540
ggcacgagac gcagtgggct atccagaagc agcaatctca gggtaaccag aactagagct
                                                                        60
gctcaaagaa aaactggtcc cgtttcatta gcaaatggat gtggcagaaa agccactcga
                                                                       120
aagagagtct atttaagtga ttctgataac aattcattgg agactggtga aattctaaaa
                                                                       180
gccagagctg gaaataaccg aaaagtctta aggaagtgtg ctgctgtggc tgccaataaa
                                                                       240
ataaagctaa tgagtgatgt agaagagaat tctagctctg aaagtgtctg ttctggtcgg
                                                                       300
aagetgeete acegeaatge ttetgetgta getagaaaaa agttattaca taattetgaa
                                                                       360
```

```
gatgaacaga gcttaaagtc agaaattgaa gaagaggagc taaaagatga aaatcaacca
                                                                      420
ttaccagtgt ccagttctca cactgcccag agcaatgttg atgaatctga aaacagagac
                                                                      480
tcagagtcag aaagtgattt gcgggtagcc cggaaaaatt ggcatgctaa tggttacaag
                                                                      540
tcccatactc cagcaccttc aaagacaaaa tttcttaaaa tagagtcttc tgaggaagac
                                                                      600
tctaaaagtc atgattcaga tcatgcatgt aacagaactg ctggcccatc aacgtctgtg
                                                                      660
cagaaactta agggcagaga gcatctcaga ggaagcagat tctgaaccag gaagatctqq
                                                                      720
tggtaggaaa tacaatacat ttcacaagaa tgcgagtttc tttaaaaaaa ccaagattct
                                                                      780
gagtgactca gaagactctg aatctgaaga gcaagataga gaagatgggn aaatgtcata
                                                                      840
aaatggaaat gaacccaatt tcnggaaatc tgacctgtga ccctattgct atgtcccagt
                                                                      900
gttcctcaga tcatggatgt gaacctgatt tggattcggn tgatqccaaa ctqqaaaacc
                                                                      960
caacaatttt tttgaagatt ctqctt
                                                                      986
```

```
<210> 3541
     <211> 792
     <212> DNA
     <213> Homo sapiens
     <22.0>
     <221> misc feature
     <222> (784)...(656)
     <223> similar to gi2565069 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3541
attgagacca tagagagccc ggcggaattc atttttttct tcaagctaga aatattacgg
                                                                       60
cttatgaagc atgtgagaca gtccccgcca tgtgctgatt acacagaccc ctgtaccaga
                                                                      120
aatcagaagg aaaggagtca gacttgaatc aaagaaatgt ctctggcaca caggccttca
                                                                      180
aattgatggc tggagcctgt cttttaagaa caaattaatt cattatagga aaaaccctaa
                                                                      240
ctaattgaaa ggtctaaatt cttcaggttc tcttgtgatc ctgggaaatg ctagaccgtg
                                                                      300
agcatcttga tggaggatgt gaactgccac ttcctcacag gcagcaggca ggtgctgaat
                                                                      360
aagtgcttgc tgaatgaatg aatgaatcac gccaaggggc atgttacctg ttccgccaaa
                                                                      420
atctgctgct gctgctgctg ctgctgcctt tgctcccgca ggaactgttg cttctgctgc
                                                                      480
tetateaact gggeeegetg ateaatgage atetgettea tgatggetge ttggggetgg
                                                                      540
ctgcccagga agccggggcc tgcgggactg gctcctgaga ccatgccacc tgagcctggg
                                                                      600
ggcacggagg actgcatggg gcctgtggtt cggggaagtc caactggatg ctqctcctqa
                                                                      660
ccgtgggatg gaagtgcagc gtaagccatg ggctgattca tcactccttt ctgcttcatg
                                                                      720
agaagcaggc gtttctggtc ttcgctcagg tgtgccctgg gggcctgaag ctagaagagg
                                                                      780
cggacgcgtg gg
                                                                      792
```

```
<210> 3542
<211> 4490
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (4493)...(772) <223> similar to gi4240307 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3542 ttttttttt ttggtgcagc gatgtttaat ggcaattcgt ataaaccaag cccatgcaca 60 agtagaaagt gcccgtggag ccggcaggag gccccgccg cgctagagaa ccacaagccc 120 ggccgtgcag ccctccccgc ggcgccttaa atagattctt cactatactc tgtatqttac 180 agtatgtaca agacccctcc cctcggggga cggggcggac tccgcaacgc gttcctatgt 240 acaccacctc cccttcggcc ctgaggtcag tggccagagt cgggtgatgg ggtaagacag 300 ggccagagag ggaggaaaca gacgcaaaca tgcggagtcg ggtggggaca cggtcagccc 360 tgaaacacga ggggcgtgcg cagcgaaggc agtggtggga accgaggcgg atacattcag 420 agacgcgtcg aacaaataaa taaggcaagt caggaggggg ccgagtcggg tgcaggcagg 480 aggagetggg gageagggge aggeaggget ceggaggtea eageggaaga tgeaggtatg 540 tggggcgcgg gttttctgga gccaggacca aaagagacgg ggcacgacca ggagggacga 600 ggagaggggt gtgggagcaa ggcqtgqqqa qqaqqqaqqa qqcctacaga ggqctccaac 660 aaaggtgaac aggaaagctg ccgacagggg ctccccctgc cccagaaagc cctctccctg 720 ttaagactgc acgaggcgcc cccagggtgg tgagaaaggc qqtqqccaqq tcatqtqqcc 780 agtcccggct ggggaagccc ttccagctcc tggttctgct tcagttccct catcctgtgt 840 cggcagcgcc gcaggaatct catgatcttc cgggctgcct ggtcctgctt cttggtgaga 900 aaggagcett tgttgeggge aggeagggtg geegaagtee ggtggggagg geegggeetg 960 cggcggtagg agcggtagtg ctgctggatg agcacagccg ctcggcggct ctgctgaaat 1020 cgcttctgtt catagtagct tcggaacttq ctctgqatca qqatqqccqc ctgggtcatc 1080 ttcttataga gtgcaaactt aagtgcaatc caggtcagct gcttgtactt ccggtaacag 1140 cgctggatta cagctgctgc tacctcctgc tgctccttca qccqccqqcc cttgtacttt 1200 cggaaggccg tctggatgac tcgggcagcc tcatacagtt cccgctgctc ttgaatctga 1260 ataatgtcaa caaggcaaaa atcaactttc caatcttgcc cactggtgga atgcagagag 1320 aaactctgcc caggagggtg ctgtaaggga caagcccagg cgacctccgc tcaaagggca 1380 agttcgctgg gaggggttga gctggggaaa tggtccacat tctcccaggt agctggccag 1440 ccaggacatg gtctcactga gccccacagc ccctgtccgc tcccgcattg aggctccagc 1500 ctcqggcagc cccacqaaqt cctctcgttt aatccgctcc ggtgtggctt cgatgatctg 1560 cttggctagt gagatcatgt ccaccgggat cacatccaca gcctgtgggc tgtcagcgtc 1620 ctccggagca gccccatcat ctgaagctgg tgggagggca ggaagggagg agagggccc 1680 cttggagttg gtagcctcat agtccatgag gagtaggggg gcttctggga caccagagga 1740 aagctggcct ggggccatgt cctccatagt catctcagag gctggcagag gtgcagggg 1800 1860 ctccgagggc gaggagacgc tgctcagacc agtgtctggg ctggaggagg gtggcgatag 1920 ggcaaatggg ggctccaccg aaggctcctg tctctgtagt tcctcaaggc agcgggcaag 1980 gcgcacatga ccccgggaat gagccacaga caatggcaga cggcccagaq agtcgggaat 2040 gctcagtgcc tgtcggttcc aacggaaaag gagcacagca gcttccaggt gtcccagggc 2100 acaagcccac atcagagggg tgcaagagaa atgatccacg ttgagcgggt caacctcctg 2160 ctctaagtcc aagcttccag tctccacact ccgccactgg ctcagggtct cgatgaggeg 2220 ggcatagccc tgggcagcag ccaggtgcag aaggctcatg ccccggaagg ggcttccatg 2280 ggccagacgt tcaggaccct tccaggtgga gcgtgggatc atgctttcta ccaaqaccac 2340 tacccqtqct tcgaacccag gcccctggcc ttcatcctga actggaggag catcaggacc 2400 ctggcaaggc acctgcccag ctgctgcgat ctctgccatc cgcttctcca tctgctccag 2460 tcgctctagt atggacatcc ggaactggtt gtcgtccagt gacagccagt caagttgagt 2520 actaggcaga gacaggaatc ggcgggctcg atactcaaag agcacagaag cagaaagggg 2580 eccetecege cetgecacet geaaagacae cagecetace teatgggegg gacagtagea 2640 gcgtaagaca ccaggctgga caagtgaggc tggcactgcg atgtgatcaa agacacagga 2700 gtaatgctcg gcggcttcgg tccaaggacc tgtgatgagc accttgaccc caccctctgg 2760 gtaggaccac tctggggaga agtctgtgat ggtgctaaga gcaggagaca gctggggggt 2820 tggagcaggg atgcttggag cttcgtcact gatgagttct cccataaqqt ctqqqaatqa 2880 tgaaagactg aagggctcca gttcactggc cccaacaggt cctccaaaca aggcctctcc 2940

```
tcttcctacc ctgcttgacg gctccaaggg ggcaggtgag ggtgggggtg agggaggggg
                                                                     3000
tgaaggtatg ggtggggcag ccccgtgacc cttgagctcc tccccactgt catcatcttg
                                                                     3060
gatgaagaag cagtttcctc ttctcccacc tgctactgac tgtggtgggg gaccccgagc
                                                                     3120
agctgcctgg ggctccaggg cagcagcagg ctctagggca gaacaggggg tatgagcggc
                                                                     3180
ctctgcctcg gggaagtctg ggcttactcc ctgccccct ccatatqtct qqccctctq
                                                                     3240
ggggctgttg agaaaacgat cagggtcaaa ggcaggactg ggaggagctg gtggggcaga
                                                                     3300
aggeteagtg cetacaacea etgecaaact catggaagge etaggateag eetgtggage
                                                                     3360
caagtgcctg gtgggcgtca agcctccagc ccgctgctcc agtcctgtca ggaggaggat
                                                                     3420
agcagtgcct cctcttgaag aaccccctcg agaagtggga gggctaggtc tgatttctag
                                                                     3480
gggctctgca aaacctgatg aggaggaaga agaggaagaa gatggggagg tgtgtgcctt
                                                                     3540
ggggagctct gggggaagtg gggctatcag tggaggaggc tctggggggt gagggtgggg
                                                                     3600
gatagaggtc agggttaaag ctcggggctc cactttggga gagatgatgc ggtgtttcgt
                                                                     3660
gctgctgcat ttgtgggtaa ggctcccaga accaagcccc ccactgcaga gacaggcgtg
                                                                     3720
ggttcgggga gcaggcttgg ttgggtgggt gtccaaaatc tgctgcacca qqtqttctac
                                                                     3780
agagaactet tetgtteeat teeegeaget ceaettgatg ceatgaaaca tgggetteag
                                                                     3840
ctgtcccaac aactcctccc gggaccactt cagccactct cgacggtcgc tgctgatgga
                                                                     3900
acaaaagatg gggctgcagc cctttccaca gtcctccagg gctgggacgt tcaggtagtg
                                                                     3960
cacaaggacg atgtcagggt tctggagcag ccagtagcag cgccgatgga atgtggggac
                                                                     4020
gatggaagag tgaacgtagc agccatagag acactccatg ccctggacct tcagcttcat
                                                                     4080
gtggtcctct cgggtggtct tcccatcctt ccgcttcttc cagaggtaac catccttccg
                                                                     4140
atatttcacc ttcttgcgat tgtagaggat gatggagcca ttctgaggcc ttgtctttgg
                                                                     4200
ggcacaagac agccactcat catgcttctc aaaggtgatc aggtaggatg caatctcctc
                                                                     4260
atttgtattc caccgtagcc tctctggagg cagcagggg cagcgaggaa gacactccag
                                                                     4320
cagcttcttg gggagaaaga tcttcaggtg gtggctgttt tcagcaacct cggtggtgtc
                                                                     4380
cttggtattc atggtgaggg ctccaggggg caaggtcacc cccggcctga ggggccgggg
                                                                     4440
ggaggggag tctgtgctcc cggggtcccg cgggtgacgg cggcaqcqgc
                                                                     4490
     <210> 3543
     <211> 823
```

```
<210> 3543
<211> 823
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (67)...(318)
<223> similar to gi4929597 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3543
ggaattccac tggccttcct ctcggaggga caaggaagcg tggcctccct ttcactcacc
                                                                       60
ttacttttcc ttctggtcca gggccagctc ttccgaggct ccagcctgct tttccgccgg
                                                                      120
gtgtcatcag gatcatgctt tgccctggag taacctgaat catctaaaaa acacggtctc
                                                                      180
aacctggcca ccgtgggtga ggcctgacca ccttgggaca cctgcaagac gactccaacc
                                                                      240
caacaacaac cagatgtgct ccagcccagc cgggcttcag ttccatattt gccatgtgtc
                                                                      300
tgtccagatg tggggttgag cgggggtggg gctgcaccca gtggattggg tcacccqqca
                                                                      360
gacctaggga aggtgaggcg aggtggggag ttggcagaat ccccatacct cgcagatttg
                                                                      420
ctgagtctgt cttgtgcaga gggccagaga atggcttatg ggggcccagg ttggatgggg
                                                                      480
aaaggctaat ggggtcagac cccaccccgt ctacccctcc agtcagccca gcgcccatcc
                                                                      540
tgcagctcag ctgggagcat cattctcctg ctttgtacat agggtgtggt cccctggcac
                                                                      600
gtggccacca tcatgtctag gcctatgcta ggaggcaaat ggccaggctc tgcctgtgtt
                                                                      660
```

<400> 3544

```
tttctcaaca ctactttct gatatgaggg cagcacctgc ctctgaatgg gaaatcatgc 720 aactactcag aatgtgtcct cctcatctaa tgctcatctg tttaatggtg atgcctcgcg 780 tacaggatct gggtacctgt gcaattttga aaacccattg gtt 823
```

cagatggagc acgtggtcca ggcttgccac cgcttcatcc aggccagcta tgaacctctg 60 ggcatctccc tgcgccccct ggaagcagaa cccccaacac ccccaacggc ccctccacca 120 ggtagtccca ggcgctccga aggacaccca gacccaccta ctgaatctcg aagctgcagt 180 caaggccccc ccagtccagc cagccctgac cccaaggcct gcaactggaa aaagtacaag 240 tacatcgtgc taaactctca ggcctcccaa gcagggagcc tggtcgggga gagaagttct 300 ggtcaacctt gcccccaagc caggctcccc agtggagacg aggcctccag cagcagcagc 360 agcagcagca gcagcagcag tgaagaagga cccattcctg gtccccagag caggctctct 420 ccaactgctg ccactgtgca gttcaatgtg gggctccagc cagtaccccc tacctcctca 480 catcccagge tcaagacace tetggateae cetetgaaeg ggetegteea etaeegggaa 540 gtgaattttt cagctgccag aactgtgagg ctgtggcagg gtgctcatcg gggctggact 600 ccttggttcc tggggacgaa gacaaaccct ataagtgtca gctgtgccgg tcttcgttcc 660 gctacaaggg caaccttgcc agtcaccgta cagtgcacac aggggaaaag ccttaccact 720 gctcaatctg cggagcccgt tttaaccggc cagcaaacct gaaaacgcac agccgcatcc 780 attcgggaga gaagccgtat aagtgtgaga cgtgcggctc gcgctttgta caggtggcac 840 atctgcgggc gcacgtgctg atccacaccg gggagaagcc ctacccttgc cctacctgcg 900 gaacccgctt ccgccacctg cagaccctca agagccacgt tcgcatccac accggagaga 960 ageettacea etgegaceee tgtggeetge attteeggea caagagteaa etgeggetge 1020 atctgcgcca gaaacacgga gctgctacca acaccaaagt gcactaccac attctcgggg 1080 ggccctagct gagcgcaggc ccaggcccca cttgcttcnt gcgggtggga nagctgcagg 1140 eccaggeett getteeetat caggettggg cataggggtg tgecaggeea etttggtate 1200 agaaattgcc accetettaa ttteteaetg gggagageag gggtggeaga teetggetag 1260 atotgootet gttttgetgg teaaaacete tteeceacaa gecagattgt ttetgaggag 1320 agagctagct aggggctggg aaaggggaga gattggagtc ctggtctccc taagggaata 1380 gccctccacc tgtggccccc attgcattca gtttatctgt aaatataatt tattgaggcc 1440

tttgggtggc accggggcct tcattcgatt gcatttccca cccctctct gaattgcccc

tgcggacgat gctaggttca ggnnnnnccc gct

1500

1533

```
<210> 3545
     <211> 607
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (138)...(494)
     <223> similar to gi5596693 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3545
cetgggegtg eteceeggg cacetactee taagagtace cattacatat cagttteect
                                                                       60
caccaagete agreecetet gecetetggt gagteteetg agreecettg gagteetet
                                                                      120
cttgctccca tgcagacaac tggaagcagg agctgacaaa attcatcagc cccgaccagc
                                                                      180
tgcctgtgga gtttgggggg accatgactg accccgatgg caaccccaag tgcctgacca
                                                                      240
agatcaacta tgggggtgag gtgcccaaga gctactacct gtgcaagcag gtgaggctgc
                                                                      300
agtatgagca cacgaggtcc gtgggccgcg gctcctccct gcaggtggag aacgagatcc
                                                                      360
tgttcccggg ctgtgtgctc agatgtcctg aggttttaca acacctacag cctggttcat
                                                                      420
tctaaacgca tcagctacac cgtggaggta ctgctcccag accaaacctt catggagaag
                                                                      480
atggagaaat tctaggtgaa cctcatggtc cccacacct cctctttgat ctctgaatcc
                                                                      540
acaatgagtt cacagccttc cctggccaga ccctgttcaa cctctcagga acagggattc
                                                                      600
tacaaca
                                                                      607
     <210> 3546
     <211> 907
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (265)...(747)
     <223> similar to gi1256001 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3546
tccagtgtgg tggaattcgg gctgtcagtg ctcggaggcc tcttcctgct ctttgtgctg
                                                                       60
gagaacatgc tggggctttt gcggcaccga gggctcaggc caagatqctq caqqcqaaaa
                                                                      120
cgaaggaatc tcgaaacacg caacttggat ccggagaatg gcagtgggat ggcccttcag
                                                                      180
ecectacagg cagetecaga gecagggget cagggecaga gggagaagaa cagecageae
                                                                      240
ccaccagete tggeceetee tgggeaceaa ggecacagte atgggeacea gggtggeact
                                                                      300
gatatcacgt ggatggtcct cctgggagat ggtctacaca acctcactga tgggctggcc
                                                                      360
ataggtgctg cettetetga tggettetee ageggeetea gtaceacett ageggtette
                                                                      420
tgccatgagc tgccccacga actgggtgac tttgccatgc tgctccagtc agggctgtcc
                                                                      480
tttcggcggc tgctgctgct gagcctcgtg tctggagccc tgggattggg gggtgcagtc
                                                                      540
```

```
ctggggtgg ggctcagcct gggccctgtc cccctcactc cctgggtgtt tggggtcact 600 gctggggtct tcctctatgt ggcccttgtg gacatgctac cagccctgtt tccgtcctcc 660 ggagcccctg cctacgccc atgtgctcct gcaggggctg gggctgctgc tggggggctg 720 cctcatgctt gccataaccc tgctggagga gcggctactg cccgtgacca ctgagggctg 780 atggggccag tggaaagggg tcgggttgcc cttccttccc cccaaccaca ggaatggagg 840 cgggacacag ggccagtagg agcaatagga ttttaataaa cagaacccat cccaaaaaaa 900 aaaaaaaa
```

```
<210> 3547
     <211> 780
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (685)...(351)
     <223> similar to gi3236368 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3547
ggaattccac gctgcttttt ctctttccta aatgcagcgc ttgcttgggg acttcaaggg
                                                                       60
aaggettttg gttggtggge tgagtgaeee caggeteega gaggggeagg cattgettgg
                                                                      120
gaggaggtgg gagatgcacg catgccctta gctaggcgtg gggtggctca gttaagaagg
                                                                      180
geactgeete egeageeeet eggegeteag eeagetgeag eeceaaaggt etagggettt
                                                                      240
agggaaccga tccaggtttg ggggcgggga gaaagttctg aggcagctcc tccctqqaca
                                                                      300
gagcagggcg accccgcgcc gggcctgcag gctcctacag ctactgcccg ccagcgggca
                                                                      360
aggcgaaggg ccctaccagc cagctgagcg ggggattgtg ctgtaggccc tccagcaqct
                                                                      420
getetaacce etgecaagee tggtgcacae cetegegget etgeaccage egetetgegg
                                                                      480
gcagctcctc tacagagcca gctgaggcca cgatgccata gagctcacag aggctgtgcc
                                                                      540
gegeeegeee caetggetge tggagetegg egggeaggee etggaggetg gagaccagge
                                                                      600
cactgtaggc cgtgtgcagc tgccggagaa ggccgcagac cctggacaga accccggcat
                                                                      660
eccgeteetg tgggaggaag gegeaaggtg agtggagace catqqqeqqq qtqqqqqae
                                                                      720
cctagccctg tgccagaccc atctcctgga cagcagcgtc ctccgcactg gcacctgagg
                                                                      780
```

```
<210> 3548
<211> 2796
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(1655)
<223> similar to gi2827158 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3548 ggaaatccca acacggggga tccttcagct catgcacagt tgcaaagagg gctacgttaa 60 agatttgaaa ggtaacccag gcctgcacag ggccatgttg gatcttgata atggtacacg 120 tccctcagag ttgggccatc tcagtcagac agcgtccctg aagaggggca gcagctttca 180 gtctggtcga gacgacacgt ggagatacaa aactccccac agggtggcct ttgttgaaaa 240 attgacaaaa ctcgtcttga gccagctgcc taacttctgg aaactctgga tctcctacgt 300 taatggaagc ctcttcagtg agactgctga gaagtctggc cagattgaaa gatcaaagaa 360 tgtaaggcaa agacaaaatg attttaagaa aatgattcag gaagtaatgc actccctggt 420 gaagettace egeggageee tgetteeeet eageateegg gatggggaag eeaageagta 480 cggaggctgg gaggtgaagt gcgagctctc cggacagtgg ctcgctcacg ccatccagac 540 tgtaagactt actcatgaat cgttgactgc ccttgaaatt cctaatgacc tgttacagac 600 tatccaggat ctcatcttgg atctccgagt acgttgcgta atggccacgt tgcagcacac 660 ggcggaagaa ataaagagat tagctgaaaa agaagactgg attgttgaca atgaaggact 720 gacttctcta ccatgtcagt ttgaacagtg catcgtgtgt tctctgcagt cactgaaggg 780 ggttctggag tgcaagccgg gagaggccag tgtcttccaa caacctaaaa cacaggagga 840 ggtttgccag ctaagcatca atataatgca ggtttttata tactgtctgg aacagttgag 900 caccaageet gatgeagata tagatactae acatetetet gttgatgttt etteecetga 960 cttgtttgga agtatccatg aagacttcag cttgacctca gaacagcgcc ttttgatagt 1020 cctaagtaat tgctgctatc tagaacgtca caccttccta aatatcgcag aacattttga 1080 aaagcacaac ttccagggaa tagaaaaaat cacacaggtt agcatggcct cattgaaaga 1140 actagatcaa agactctttg aaaattacat cgagttgaaa gcagatccca tcgttggctc 1200 cttagaacct ggaatttatg caggatattt tgattggaag gactgcctgc ctccaacagg 1260 tgtcagaaac tatttaaaag aagcactggt gaatataatt gccgtgcatg cagaggtgtt 1320 caccatttcc aaagaactgg tccctcgggt actatccaag gtgatagaag cagtttctga 1380 agageteagt egactgatge agtgtgttte atcetteage aaaaatggag etttacagge 1440 gagacttgaa atctgtgctt tgagggacac tgtggctgtt tacctgacac ccgaaaqcaa 1500 gtcaagtttt aagcaggett tggaageeet geeecagett tecagtggag cagataaaaa 1560 gttactggaa gagctcctga acaagttcaa gagtagcatg cacttgcagc tcacctgttt 1620 ccaagcagct tcttcaacca tgatgaaaac ataaatatct gccacataaa agaagtccag 1680 gaaaataaca cgtaataaga ctgttcactc tctaagtacc ctaaaggtat ttggtgtatt 1740 aaacattggg tttgccattt ttctcttttt tcttcctctg acttcgaaaa ttgttggtat 1800 acatttcaac caaaatgacc tcatttgaaa tgcccaggaa gtatttgttt tgccattctt 1860 actagatcag atcctgtatg actttaaaat acattttaaa atatattttg catctcagca 1920 gaaggttgag tgctgcagga agagctgctt ctgcagggag ttttctggaa tggcgtggca 1980 catattgaag catttctcag tgtcccgttc acggaagcgc aggcagctcc cacgacacac 2040 ggagagactg actgatacga gatttggaaa gctatgtaga catctttgga gctcttactg 2100 tcctaaactg tacagctgtg cttaaaaccc ttatttcata taaatggcct taagttttct 2160 aattcaagcg ggtttttgga aaaatttatg gtctccatta aaatacatat tacaactggg 2220 gtagattatt tgtggtccag gtgtctgtga tttaactttg cgttttgcta tctgattttt 2280 atttttcaca gggctaagca tgagctttca ttctcactca ctcttaattt gtcgtgcgtc 2340 actacacatg cacgtgttgc agtccctgag gccctgtgtg ttatctgtga tggagtgtga 2400 atgtgtaacg ggcactgtgt tacactctca ggtgttggcg gggcggtcgc agacttcagg 2460 gtcccctaac ggaaaggcca ggctccgcgt ggacggccaa ctccctgccc gctccttcag 2520 caggtgactg tctctgccac ttcttacctg ctgaaggatc ttgctcagta gctggaacaa 2580 tgctgctgtc acacagtctc ttctctgaaa cttcaggatg ctccttggtc accaggcaat 2640 gggagctgta gaccagccgc atgcacttgc cccacattca ctggtgactg gcttcactgg 2700 aataagttca ggtcaccggg acttctctca gagtcagcgg cccacccaac tccctcatac 2760 cgtcgcatct gaaaatttca gagaggaatc tctttg 2796

<210> 3549 <211> 4197

```
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)...(3727)
<223> similar to gi1469193 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 3549 geoetgetge ceetgageae aeggaeeegt eegaaeegeg gggeagtgtg teetgetget 60 ccctgctgcg gggactgtcc tcagggtggt cctcacctct gcttccggcc cctgtgtgca 120 accetaacaa ggecatette aeggtggatg ceaagaceae agagateete gttgetaaeg 180 acaaagcttg cgggctcctg gggtacagca gccaggacct gattggccag aagctcacgc 240 agttctttct gaggtcagat tctgatgtgg tggaggccct cagcgaggag cacatggagg 300 ccgacggcca cgctgcggtg gtgtttggca cggtggtgga catcatcagc cgtagtggg 360 agaagattcc agtgtctgtg tggatgaaga ggatgcggca ggagcgccgc ctatgctgcg 420 tggtggtcct ggagcccgtg gagagggtct cgacctgggt cgctttccaq agcgatggca 480 ccgtcacgtc atgtgacagt ctctttgctc atcttcacgg gtacgtgtct ggggaggacg 540 tggctgggca gcatatcaca gacctgatcc cttctgtgca gctccctcct tctggccagc 600 acateceaaa gaateteaag atteagaggt etgttggaag ageeagggae ggtaceaeet 660 tccctctgag cttaaagctg aaatcccaac ccagcagcga ggaggcgacc accggtgagg 720 cggcccctgt gagcggctac cgggcatctg tctggqtqtt ctgcaccatc agtgqcctca 780 tcaccctcct gccggatggg accatccacg gcatcaacca cagcttcgcg ctgacactgt 840 ttggttacgg aaagacggag ctcctgggca agaatatcac tttcctgatt cctggtttct 900 acagctacat ggaccttgcg tacaacagct cattacagct cccagacctg gccagctgcc 960 tggacgtcgg caatgagagt gggtgtgggg agagaacctt ggacccgtgg cagggccagg 1020 acccagctga ggggggccag gatccaagga ttaatgtcgt gcttgctggt ggccacgttg 1080 tgccccgaga tgagatccgg aagctgatgg aaagccaaga catcttcacc gggactcaga 1140 ctgagctgat tgctggaggc cagctccttt cctgcctctc acctcagcct gctccagggg 1200 tggacaatgt cccagaagga agcctgccag tgcacggtga acaggcgctg cccaaggacc 1260 agcaaatcac tgccttgggg agagggaac ctgtggcaat agagagcccc ggacaggatc 1320 ttctgggaga aagcaggtct gaaccagtgg atgtgaagcc atttgcttcc tqcqaaqatt 1380 ctgaagctcc agtcccagct gaggatgggg gcagtgatgc tggcatgtgt ggcctgtgtc 1440 agaaggccca gctagagcgg atgggagtca gtggtcccag cgggtcagac ctttgggctg 1500 gggctgccgt ggccaagccc caggccaagg gtcagctggc ggggggcagc ctcctgatgc 1560 actgcccttg ctatgggagt gaatggggct tgtggtggcg aagccaggac ttggcccca 1620 gcccctctgg gatggcaggc ctctcgtttg ggacacctac tctagatgag ccgtggctgg 1680 gagtggaaaa cgaccgagaa gagctgcaga cctgcttgat taaggagcag ctgtcccagt 1740 tgagccttgc aggagccctg gatgtccccc acgccgaact cgttccgaca gagtgccagg 1800 ctgtcaccgc tcctgtgtcg tcctgcgatc tgggaggcag agacctgtgc ggtggctgca 1860 egggeagete etcageetge tatgeettgg ceaeggaeet eeetggggge etggaageag 1920 tggaggccca ggaggttgat gtgaattcgt tttcctggaa cctcaaggaa ctctttttca 1980 gtgaccagac agaccaaacg tcatcaaatt gttcctgtgc tacgtctgaa ctcagagaga 2040 caccetette ettggeagtg ggeteegate cagatgtagg cagteteeag gaacaggggt 2100 cgtgtgtcct ggatgacagg gagctgttac tactgaccgg cacctgtgtt gaccttggcc 2160 aaggccgacg gttccgggag agctgtgtgg gacatgatcc aacagaaccg cttgaggttt 2220 gtttggtgtc ctctgagcat tatgcagcaa gcgacagaga aagcccagga cacgttcctt 2280 ccacgttgga tgctggccct gaggacacgt gcccatcagc agaggagcca aggctgaacg 2340 tecaggicae etecaegeee gigategiga igegegggge igeiggeeig eagegggaga 2400 tccaggaggg tgcctactcc gggagctgct accatcgaga tggcttacgg ctgagtatac 2460 agtttgaggt gaggcgggtg gagctccagg gccccacacc tctgttctgc tgctggctgg 2520 tgaaagacct cctccacagc caacgcgact cagccgccag gacccgcctg ttccttgcca 2580 gcctgcccgg ctccacccac tctaccgctg ctgagctcac cggacccagc ctggtggaag

2640

```
tgctcagagc cagaccctgg tttgaggagc cccccaaggc tgtggaactg gaggggttgg
                                                                     2700
cggcctgtga gggcgagtac tcccaaaagt acagtaccat gagcccgctg ggcagtgggg
                                                                     2760
ccttcggctt cgtgtggact gctgtggaca aggaaaaaa caaggaggtg gtggtgaagt
                                                                     2820
ttattaagaa ggagaaggtc ttggaggatt gttggattga qqatcccaaa cttgggaaag
                                                                     2880
ttactttaga gatcgcaatt ctatccaggg tggagcacgc caatatcatc aaggtattgg
                                                                     2940
atatatttga aaaccaaggg ttcttccagc ttgtgatgga gaagcacggc tccggcctag
                                                                     3000
acctettege tttcategae egecacecea ggetggatga geceetggeg agetacatet
                                                                     3060
tccgacaagt gagagcaggg ccagagccgt ctagtgtcag cagtgggata cctgcgcttg
                                                                     3120
aaggacatca tccaccgtga catcaaggat gagaacatcg tgatcgccga ggacttcaca
                                                                     3180
atcaagctga tagactttgg ctcggccgcc tacttggaaa ggggaaaatt attttatact
                                                                     3240
ttttgtggga ccatcgagta ctgtgcaccg gaagttctca tggggaatcc ctacagaggg
                                                                     3300
ccggagctgg agatgtggtc tctgggagtc actctgtaca cqctqqtctt tqaqqaqaac
                                                                     3360
cccttctgtg agctggagga gaccgtggag gctgccatac acccgccata cctggtgtcc
                                                                     3420
aaagaactca tgagccttgt gtctgggctg ctgcagccag tccctgagag acqcaccacc
                                                                     3480
ttggagaagc tggtgacaga cccgtgggta acacagcctg tgaatcttgc tgactataca
                                                                     3540
tgggaagagg tgtttcgagt aaacaagcca gaaagtggag ttctgtccgc tgcgagcctg
                                                                     3600
gagatgggga acaggagcct gagtgatgtg gcccaggctc aggagctttg tgqqqqcccc
                                                                     3660
gttccaggcg aggctcctaa tggccaaggc tgtttgcatc ccggggatcc ccgtctgctg
                                                                     3720
accagctaaa caccaattto ttoctgottt totocacttg gtttggaaaa toacacagtt
                                                                     3780
ttcaggctcc atctgtttgg agaaaataca ttctgaagca tccccaattc accttctaaa
                                                                     3840
aactcatgtg caggtttgat aaacaccaga acagaaqaca qtqatqctqt attattttaq
                                                                     3900
atttattaca tagatttgga attcactttt ttcatgacct agaaaaaac attccagtgt
                                                                     3960
tcaactgttt tatattatta aagggctttt aatttgtgaa cttctgaagg catgagtgtt
                                                                     4020
ttctctttct acttttgtat atgtgcatgt tttgtttcct ctgacttggt atatgctcat
                                                                     4080
ctgagtgacg gatatgtgaa atttgtagaa ctggttagtc aaatggccag actatttcat
                                                                     4140
taatttattt cctcaaatgc ttttcaaatt aaagcacctt tgttagtaaa cagttaa
                                                                     4197
     <210> 3550
    <211> 1239
    <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1240)
    \langle 223 \rangle n = a,t,c or q
    <220>
    <221> misc feature
    <222> (1169)...(931)
     <223> similar to gi1710216 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3550
agagtttttt tttttttaa tcagaatgac aaaggtaaag cagtgtttag gaacataaat
                                                                       60
ctgacaggtg gctcgccagg tcacttggag ccaggatagg caggagtagc tggccagaga
                                                                      120
cgagcagccc tgaaaactgt tcctgccctg gcctcacctc gtcaccacgt ctgctgtgga
                                                                      180
```

240

300

360

aagggctgcg acctggaggc tgtgctgttg aacaggcaca tcgaggaggt ccaacacagc

gtcagaactc ccacgccctc ttctcagctc tgccccttgg tcagctgtca ggtgactccc

aggcagagtc cgttttgagg ctcctgggac tggaatacgg gaccagcctg agttgctgtc

```
agtcacgtcg caggagaaag gactggcaaa ggctcatggc cccttgaaat tctgttcctt
                                                                      420
ctaggccttt cctaagaagc ttgtggcctt ctcaacttgg attgaccgga cccgctgggc
                                                                      480
caggaacacc tgggccatgc tcgccatctt catcctggtg atggcaaatg tcgtggacat
                                                                      540
ggtgagctcc tgctgtcctt gttgaaggga cgcccctgtt ctcagtggag aagggcttct
                                                                      600
gtttgggtca cacaagcagt ttctcagtcc atccctccac cgtcatgtag ctttggagtg
                                                                      660
gctcttaggt tcccaaacac atcatcccca cctagtggaa ggagtcttgt ccctgtcatc
                                                                      720
cagggagect ctgggatgga cttgtttect tgaageteet eteccagagt eegagageae
                                                                      780
agttccatgt gcccaggcct gtgctaggta ccttatgtat gttgattcat ttaatctgtg
                                                                      840
aaaaagtcct gagcagttgt accagtatct gcagtttcat agggagaaac taactctcaa
                                                                      900
aaagggtaat tggttgggcg cggtagctca cgcctgtaat cccagcactt tgggaggcca
                                                                      960
aggtgggcgg atcacgaggt caggagttcg aaaccagcct ggccaacatg gtgaaacccc
                                                                     1020
atctgtacta aaaatacaaa aattagccag gcatggtggt gcacacctgt aatcccagct
                                                                     1080
acttgggagg ctgaagcagg agaatcgctt gaacccagga ggcggaggtt gcagtgagcc
                                                                     1140
gagattgage egetgeacte cageetagge aacagacage aagacgaatt ceaceacaet
                                                                     1200
gantagggat ctcgaaaggg nctcgaanng gcatctcca
                                                                     1239
```

```
<210> 3551
<211> 1587
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(783)
<223> similar to gi4210354 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3551 atgaggatgg aggccgggga ggcagcgccg ccggcggggg cgggcggccg cgccgcaggc 60 ggctggggca agtgggtgcg gctcaacgtg gggggcacgg tgttcctgac cacccggcag 120 acgctgtgcc gcgagcagaa gtccttcctc agccgcctgt gccaggggga agagctgcag 180 teggaceggg atgagacegg ggeetacete attgacegtg accecaceta ettegggeee 240 atcctgaact tcctccggca tggcaagctg gtgctggaca aggacatggc tgaggagggg 300 gtcctggagg aagccgagtt ctacaacatc ggcccgctga tccgcatcat caaagaccgg 360 atggaagaga aggactacac ggtcacccag gtcccaccca agcatgtgta ccgcgtgctg 420 cagtgccagg aggaggagct cacgcaaatg gtctccacca tgtctgatgg ctggcgcttc 480 gagcagctgg tgaacatcgg ctcctcctac aactacggca gcgaggacca ggcagagttc 540 ctgtgtgtgg tgtccaagga gctccacagc accccaaacg ggctgagctc agagtccagc 600 cgcaaaacca agagcacgga ggagcagctg gaggagcagc agcagcagga ggaggaggtg 660 gaggaggtgg aggtggaaca ggtgcaggtg gaggcagatg cacaggagaa agctgttaca 720 agccagaggc acccggatgt gaggccccag atcacctcca gggacttggg gttcccatct 780 gaaatccttt atttttgtac catggggtgg gccccgggcc tgagaaggaa gaagcaccct 840 ctccccggcc tcctctgtct gcacccgtgg ggctgtgact tactcctgcc tccaggggcg 900 gggcggggcc cccctgggac ctcttaaggc ccaaggtggg ccccaggacc tctgggcaga 960 gtggactgct catggcagat gtgtggcaat gtctggctgt gtctctccgg cacctgcgtc 1020 ccctctcccg ggctcccctg ctgcatggtg gatgtgctcc ttcctggccc ggtcacattg 1080 cctccttgag ccttagtcca gggggtcact cctcccaccc cacctacctc acagggttgt 1140 tgtgagggtg cacagaggag caaagtccct gaaggccctc aggcagtata taggggccgc 1200 ccaccttcag ctgccctggg atgggaagga cccagcccga cccctgggca taacactgtg 1260 tttgcaaatg gagattcagg tattggggat gcaggttgtg gggagctggc ctggcagagt 1320

```
aggggtagtt ggcttggcct tctctttggt gatcccaccc ccagccattt gcattgctgg 1380 cccagcgcct ggcctgggg gcggggagag gcagcagaag gggctgggca ggggcggtgg 1440 aggactcagg aactgcccgg ggagagtggg tatggcggct gagccagggg ccctcctgtg 1500 tttgacttcc cgggatgggt ccttgcttct cagctgtgtc cgaccccacc atgtaataaa 1560 acccaaagga acagcccaaa aaaaaaa 1587
```

```
<210> 3552
<211> 4367
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4368)...(707)
<223> similar to gi4240217 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3552 ttttttttt ttgtgcaaga tttaataaaa aacaaacaaa aataggaaat ggttgctttc 60 aaaaatttcc ccaggttgtg aaaaggtttg ccaacgactc tcagggggtg tggttctaag 120 ctgcatcaag tgaaacaaat acaaaatgct gtccctcctc cctgggctcg gaaggcagtg 180 cactttctcc ctcttaacag cccagactag cgggtgagga gtcagtgctg tgaccccagg 240 gccaagctgg agtgtccgca tagctttttc tctgaccagt ggggattcca tctaccttga 300 ggcgtgctgg cctgggcccc gtttccacac cagcacatgg tgagacaggg tagcttatca 360 acaggctgct gggccttaat actgacagtg agtgttgggc cgggtcacag ccaggggaaa 420 ggacttaaca cagattgccc tcccaagccc ccactggctg ggcctaattt taggattacc 480 acgggaaaaa aagctttgat gaaagacaac aggaagtcaa cacagcagag agtggtgtgg 540 acaacccaga agccagcete aegcatteca tgeccacagt taacgatgae aacaacagca 600 ataataataa taataataaa acaaaggtac aggtgaaaag cagcgcttgg ggtgtgctgc 660 tgcaagctgg ggaaggcgcg tgctcaactt ggatgggaca cacctagtct ttcttcaagt 720 ecctggatte aaagagette aacegttett geacegteag geetteette agaetettgg 780 acctgatgtt tetgagttge egggtgaeae aggatetgte tttetteaag aagteagggt 840 tgcttttaga tttcattata tcatatccgg acaccgtggc actgtcaggg gacttctccc 900 ccagtgcttc cgttgcagcc ttgagctgct ccttcaacct gctgatgtca cagtcagcct 960 tagccttcgc gatgctgagc tctgtgtaga tgtctttgta cttgtcactt gcatacttct 1020 tgtcccgcag tgccgtctgc agctcatcct tgagggagct aatctcctgt ttcaggtact 1080 gtatttccga ttcctttacc cgcaataaga cctctagttc ataggcatcc ttgccctgtg 1140 caaggggtga cccagtggcc tccccaccgc cgtccccaat caagcaacgt ccgcaaccgt 1200 gtgatetetg cagecaggeg gttgtteage teetggttgt gggeattgag eteetggtte 1260 tcacgctggc actgccgcag ggcctgccgc tcggcctcca gcgcctgggc cagatgggca 1320 ttetecagge aettetgega gtaetgetee gagaggaeet ecaagtteca egetgeaeeg 1380 actgcagctc cctccaggta ctggcgccgc agggcctcaa acatccgaag ttgacgctgc 1440 tgatetggga cegetggete tteteceagt ecegetecat tteeteeegg tgggegttet 1500 tcatggcttc gatggctgag atggtggccg ctgtctcctc ggctaggagg cggtctttct 1560 cttctcgaag tttctctagc tcccgctggt gctgcctctg gagatcttca atcttccttc 1620 tggtgcgttt cttccattgc tgcaaaccct cgctcgcacg tggccttaag gctctccaag 1680 tecetetggt actteteacg cagtgtggee gegtegeeet ecaggteett gtgteecage 1740 tectecegea tgacatecat etgggeetee ageteetgga tgegeteeet eageeeegte 1800 atggagtcag cctctccctg ggtggcctgc cagttggggg caggggctgg cagggccttg 1860 gggtgtggcc cctggtggag gcagagggtg tcctgaaggc acctcaggct ctgcqaqtaq 1920

```
tgctcctgca gggtcctcag ctcctcctcg tggatcgtct gcagctcccg gaccttgagc
                                                                     1980
tggaacctgt cctccagggt ctgtatctgc tcaccatgat gcctctccat gtcctgcctg
                                                                     2040
tctctgaccg aggcatccag ctggctcagg acccggctgc gctcagcctg cagtgtgctc
                                                                     2100
teggteetgg teagetgete caccacaca egaateteet eeteataeet geeeggagg
                                                                     2160
gtgaacatgc tcatgctgtg cttgctctct gcatcctcca gacactgctg ctgatggtct
                                                                     2220
agctgggcgg ccttggcctt gagctctgca ttctcccttt caacaatggc gatcacatcc
                                                                     2280
aggtactcgc tcttctgctt gcggagaagc tcctcatact cctcctcag ggcccgggct
                                                                     2340
gcctgtgcct gctctgagca ggagggctcc cgggtttgcc aggactcctt gcagagctgg
                                                                     2400
ageteettet catattetag ceggattetg caggaegeat ageaaacetg ggeetgaata
                                                                     2460
atggcatcct gaaccaacaa tgaagaatac tgaccgaggc ctcccaaaca agtgttatac
                                                                     2520
gagagaetet gggaeaeetg gagaagette tggeaatete teagegatte caeaggtgge
                                                                     2580
agagatggta aggcagccgc tatctcctct aagaggctgg ccttctcctt cagctgctgg
                                                                     2640
gcaageteet eetgaatage aacaaaggee eeagggetet ggteagaeae ategaaggge
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tectgagage tgtetgagte teggeecagg aetteteeta aggggeteag gteecaggae
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agctgaacac catcttcatg gcccgctgga agcctgaggg cttccaagac ctgctgcatc
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actettteaa agtetggggt ttggtagget eccaggattt eccteageag geatttgtge
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tgccgcaggg ccgtctgggt gccccgcagg gtctcctgga tgctctgtag cctgcggtgg
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aacgactccc tcactgactg tgtggcaaag ctgagctctg ccctgaccca tgtggcattg
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gccaggatgg gggccaggcc ctgtgggatg ctttgctgcc cgtctcctga ggcaccgact
                                                                     3060
gcctctcctc ccagtgtccc caagtgcttc ctcagagact caacctggct ccagaactca
                                                                     3120
ccatccacta ggaccttcct ggcccaggtg tctacggggg ccccagcaga ttccatcggt
                                                                     3180
ggctgtcctg accaagaaat ctcatggagc attcgggaga catctgatgt tgtgttcttc
                                                                     3240
agggaatctg ctatctggct gatcagcgag gcctccagag caatctggtc agaaagaagc
                                                                     3300
ctcacctgct cctgctctgt caactcagac tgggagcact gctgcaggga ggcaggcttc
                                                                     3360
ccattetect eggtgecaee tgtetecage tgtgeaeggg eccegeeatg ggetggggee
                                                                     3420
ggccagtgct gcagggcttg gatggcgctg acgagtgcac tctccacact ggccagggag
                                                                     3480
gctgcgcgtg cgtcctgctc atcctcctgg ctggccctag gcagagatct cagttgttct
                                                                     3540
cggcaatttt ccaggcacat cagggcctga ctattcttga cctggaagtc cccaagctct
                                                                     3600
ccaacatgcc cttcaaccct cctggccctc tcctgcctct cctgctccag ctgggaggcc
                                                                     3660
agtgcgccaa cctggagcag gctggcgcgg agctgctcac gcagctgggc ctcggtgccc
                                                                     3720
gcccactggt ggtgcagtgc gagcagtgcc tcacggctct gaccctgctg gctctccagc
                                                                     3780
ctcacggtca cgtctttgag cttttcctct gtgacgtaga gcttggtctc cagggagtgg
                                                                     3840
atgatggaga ggtacgtgtc agagtcgcca gttgcaggca gtacactggg tgcaggctct
                                                                     3900
gaggacatgc tttcttccga gggtgaccgg tcctggctgg tgtcggaaga tgtgctgctg
                                                                     3960
gtccaggtct tctcagaccc ttcggggtga atgtatcttt ggcactggat tgtggagaac
                                                                     4020
cggattcttt gccttttaac accaggtgcc ccttggtcga gtttggctgt gccctgctga
                                                                     4080
tggccctccc tgtcaagcac ttccactgac tttgggggca ccatgctgtc ttccctactg
                                                                     4140
gggctgccat caccgtactc ttcccccgga ggagccccca ggtcctcgtc ctcatcctcg
                                                                     4200
agccttgtgt gtgggaggcc tagaggtgcc ctagtggctt ggactggttg gcctgggagc
                                                                     4260
aaagtgccat ccctttctgt ctcttcaggg gtactccgtg gctcttccat gtcctttgga
                                                                     4320
gattcacttg caaatttcct taaaatctct tcttttgcct ggagctt
                                                                     4367
```

```
<210> 3553
<211> 1919
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(940)
<223> similar to gi5748546 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3553
atggagccag gcagcgtgga gaacctgtcc atcgtgtacc ggagccgcga cttcctggtg
                                                                       60
gtcaacaagc actgggacgt tcgcattgac agcaaggcgt ggcgggagac tctgaccctg
                                                                      120
cagaagcage tgcggtaccg ettteccgag etggccgace etgacacetg etacgggtte
                                                                      180
aggttctgcc accagctgga tttctccacc agcggggcgc tgtgcgtggc cctaaacaag
                                                                      240
gcagccgccg gcagcgcgta caggtgcttc aaggagcggc gcgtgaccaa ggcttacctg
                                                                      300
gcattgctgc gggggcacat ccaggagagc cgggtaacca tcagccatgc cattggcagg
                                                                      360
aacagcacgg agggccgggc ccacaccatg tgcatcgagg gctcgcaggg ttgtgagaac
                                                                      420
ccaaagccaa gcctcacaga tctcgtggtt ctggaacacg ggctgtacgc aggcgatcct
                                                                      480
gtctccaaag tgctgctgaa gccgctcacg ggccggacac accagctgcg cgtcgcactg
                                                                      540
cagtgccctg ggccaccccg tggtgggcga cctgacctac ggagaagtct cgggccggga
                                                                      600
ggaccggccg ttcagaatga tgctgcacgc tttctacctg cgcatcccca cggacaccga
                                                                      660
gtgtgtggag gtctgcacgc ctgacccctt cctgccctcc ctggatgcct gctggagccc
                                                                      720
ccacacactg ctgcagtcgc tggaccagct cgtgcaggcc ttacgggcca cccccgaccc
                                                                      780
tgaccccgag gataggggcc ccaggccagg cagcccctcc gcactcctgc ctgggcccgg
                                                                      840
ccggcctcct ccaccccaa ccaagccccc tgagactgag gcacagcggg gcccctgcct
                                                                      900
gcagtggctg tcggagtgga cgctggaacc ggacagctga gagccgtggg gctggggcag
                                                                      960
ggggtgtcag ctgcacagcg gagactctag ggagatgggc gagcgagcgt ctgctcactg
                                                                    1020
gctctggggc ctcgaggtgc caggcagcat caggcccact gggttgcccc ggccaggcct
                                                                    1080
gcgaggaagg gctgaggtgg ggccggcagg gggcgccagg cagccgtgat cacaggtgac
                                                                    1140
gaccgcaccg cggccgtggg actgatgcgg gatcccgagg gccttcctgc ccacatgccc
                                                                    1200
cgggagaaac cgaggcccct ccctcctcct ggaacagctt ccggctctca agcgtcaccc
                                                                    1260
caggggcgtc agttttacgg actcaaggtc acctcaggaa gaggcagggc caggttttgg
                                                                    1320
gataggettt geeteeagga tgggetgete etgggeetgg tgagetaetg ecceeaect
                                                                    1380
accetetaga ggggetggga agggeegtte tgggeteace tggeetggga gacceatetg
                                                                    1440
gtccctgcgt cctctgcccc tcactgctct gtgcagatcc tgtcgccctc agctgcctcc
                                                                    1500
tecegagace taatggteee tgetgggete gagtetgeag geeeggetge gtgtgeettg
                                                                    1560
                                                                    1620
geeteactgt accagtggtt ecetetetge eeggattetg ageteagtgt ggtgtttggt
gcacaggggt tggtcagggg ccatggccaa ggccctgcca cgcacgccca tccctcagat
                                                                    1680
ccactgtgag caccaacctg ctgcagtctc ttgggcccct gctggcagct ctgccacgtc
                                                                    1740
accgcctgcc tggctcccac acagccatgc attgtcactc tgcctccggg accccagctt
                                                                    1800
gggagetgtg ggtetgeeag gteecacete etetgteece catgecacaa cetgggetee
                                                                    1860
tggctacagc agggctccag ggactccaaa taaatgttca gtgactggca aaaaaaaa
                                                                    1919
```

```
<210> 3554
<211> 601
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (42)...(506)

<223> similar to gi2827495 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3554
gcgcggcgcg ccagcaacac tgcacgcagg tgcgcagccg gcggctcatg aaggagctgc 60
```

```
aggacatcgc gcgccttagc gaccgcttca tctccgtgga gctggtggac gagagcctgt
                                                                      120
tcgactggaa cgtgaagctg caccaggtgg acaaggactc ggtgctgtgg caggacatga
                                                                      180
aggagaccaa caccgagttc atcctgctca acctcacctt ccccgacaac ttccccttct
                                                                      240
egeegeeett catgegggtg eteageeege geetggagaa eggetaegtg etggaeggeg
                                                                      300
gcgccatctg catggagctg ctcacgccgc gcggctggtc cagcgcctac accgtggagg
                                                                      360
ccgtcatgcg ccagttcgca gccagcctgg tcaagggcca gqqacqqatc tqtaqaaaaq
                                                                      420
ctggcaaatc aaaaaagtcc ttcagtcgca aggaagctga agctaccttt aagagtttgg
                                                                      480
gtgaagacgc atgaaaaata tggttggggt caccccgccc gtgttcccga cggctgatgt
                                                                      540
ctgccacgtg cagtagacgg ttcgagcgcc tgtccacaca cacaccaqta ccctqacatc
                                                                      600
                                                                      601
```

```
<210> 3555
<211> 3479
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3389)

<223> similar to gi4754909 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3555 atgaactete ccaacgagte ggatgggatg teaggteggg aaccateett ggaaateetg 60 ccgcggactt ctctgcacag catccctgtg acagtggagg tgaagccggt gctgccaaga 120 gccatgccca gttccatggg gggtgggggt ggaggcagcc ccagccctgt ggagctacgg 180 ggggctctgt ggaccccaca ctgcgggagc agcaactgca gcaggagctc 240 ctggcgctca agcagcagca gcagctgcag aagcagctcc tgttcgctga gttccagaaa 300 cagcatgacc acctgacaag gcagcatgag gtccagctgc agaagcacct caagcagcag 360 caggagatgc tggcagccaa gcagcagcag gagatgctgg cagccaagcg gcagcaggag 420 ctggagcagc agcggcagcg ggagcagcag cggcaggaag agctggagaa qcaqcqqctq 480 gagcagcagc tgctcatcct gcggaacaag gagaagagca aagagagtgc cattgccagc 540 actgaggtaa agctgaggct ccaggaattc ctcttgtcga agtcaaagga gcccacacca 600 ggcggcctca accattccct cccacagcac cccaaatgct ggggagccca ccatgcttct 660 ttggaccaga gttcccctcc ccagagcggc ccccctggga cgcctccctc ctacaaactg 720 cetttgcctg ggccctacga cagtcgagac gacttccccc tccgcaaaac agcctctgaa 780 cccaacttga aagtgcgttc aaggctaaaa cagaaggtgg ctgagcggag aagcagtccc 840 ctcctgcgtc gcaaggatgg gactgttatt agcaccttta agaagagagc tgttgagatc 900 acaggtgccg ggcctggggc gtcgtccgtg tgtaacagcg cacccggctc cggccccagc 960 tctcccaaca gctcccacag caccatcggt gagaatggct ttactggctc agtccccaac 1020 atccccactg agatgctccc tcagcaccga gccctccctc tggacagctc ccccaaccag 1080 ttcagcetet acaegtetee ttetetgeee aacateteee tagggetgea ggecaeggte 1140 actgtcacca actcacacct cactgcctcc ccgaagctgt cgacacagca ggaggccgag 1200 aggcaggccc tccagtccct gcggcagggt ggcacgctga ccggcaagtt catgagcaca 1260 tcctctattc ctggctgcct gctgggcgtg gcactggagg gcgacgggag cccccacggg 1320 catgcctccc tgctgcagca tgtgctgttg ctgqaqcaqq cccqqcaqca qaqcaccctc 1380 attgctgtgc cactccacgg gcagtcccca ctagtgacgg gtgaacgtgt ggccaccagc 1440 atgcggacgg taggcaagct cccgcggcat cggcccctga gccgcactca gtcctcaccq 1500 ctgccgcaga gtccccaggc cctgcagcag ctggtcatgc aacaacagca ccagcagttc 1560 ctggagaagc agaagcagca gcagctacag ctggqcaaqa tcctcaccaa qacaqqqaq 1620

```
ctgcccaggc agcccaccac ccaccctgag gagacagagg aggagctgac ggagcagcag
                                                                     1680
gaggtettge tgggggaggg ageeetgaee atgeeeeggg agggeteeae agagagtgag
                                                                     1740
agcacacagg aagacctgga ggaggaggac gaggaagacg atggggagga ggaggaggat
                                                                     1800
tgcatccagg ttaaggacga ggagggcgag agtggtgctg aggaggggcc cgacttggag
                                                                     1860
gageetggtg etggatacaa aaaactgtte teagatgeee ageegetgea geetttgeag
                                                                     1920
qtqtaccagg cgcccctcag cctggccact gtgccccacc aggccctggg ccgtacccag
                                                                     1980
tecteecetg etgeecetgg gggeatgaag ageececag accageecgt caageacete
                                                                     2040
ttcaccacag gtgtggtcta cgacacgttc atgctaaagc accagtgcat gtgcgggaac
                                                                     2100
acacacgtgc accetgagca tgctggccgg atccagagca tctggtcccg gctgcaggag
                                                                     2160
acaggeetge ttageaagtg egageggate egaggtegea aageeaeget agatgagate
                                                                     2220
cagacagtgc actctgaata ccacacctg ctctatggga ccagtcccct caaccggcag
                                                                     2280
aagctagaca gcaagaagtt gctcggcccc atcagccaga agatgtatgc tgtgctqcct
                                                                     2340
tgtgggggca tcggggtgga cagtgacacc gtgtggaatg agatgcactc ctccagtgct
                                                                     2400
gtgcgcatgg cagtgggctg cctgctggag ctggccttca aggtggctqc aggagagctc
                                                                     2460
aagaatggat ttgccatcat ccggccccca ggacaccacg ccgaggaatc cacagccatg
                                                                     2520
ggattctgct tcttcaactc tgtagccatc accgcaaaac tcccacagca gaagttgaac
                                                                     2580
gtgggcaagg teeteategt ggaetgggae atteaceatg geaatggeae ceageaggeg
                                                                     2640
ttctacaatg acceptetgt getetacate tetetgeate getatgacaa egggaactte
                                                                     2700
tttccaggct ctggggctcc tgaagaggtt ggtggaggac caggcgtggg gtacaatgtg
                                                                     2760
aacgtggcat ggacaggagg tgtggacccc cccattggag acgtggagta ccttacagcc
                                                                     2820
ttcagcttga gccatccctt tgcaggacag tggtgatgcc cattgcccac gagttctcac
                                                                     2880
ctgatgtggt cctagtctcc gccgggtttg atgctgttga aggacatctg tctcctctqq
                                                                     2940
gtggctactc tgtcaccgcc agatgttttg gccacttgac caggcagctg atgaccctgg
                                                                     3000
cagggggccg ggtggtgctg gccctggagg gaggccatga cttgaccgcc atctgtgatg
                                                                     3060
cctctgaggc ttgtgtctcg gctctgctca gtgtagagct gcagcccttg gatgaggcag
                                                                     3120
tettgeagea aaageeeaac atcaaegeag tggeeaeget agagaaagte atcgagatee
                                                                     3180
agagcaaaca ctggagctgt gtgcagaagt tcgccgctgg tctggggccgg tccctgcgag
                                                                     3240
aggcccaagc aggtgagacc gaggaggccg agactgtgag cgccatggcc ttgctgtcgg
                                                                     3300
tgggggccga gcaggcccag gctgcggcag cccgggaaca cagccccagg ccggcagagg
                                                                     3360
ageceatgga geaggageet geeetgtgae geeeeggeee ceatecetet gggetteace
                                                                     3420
attgtgattt tgtttatttt ttctattaaa aacaaaaagt cacacattca aaaaaaaaa
                                                                    3479
```

```
<210> 3556
<211> 740
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (741)...(261)
<223> similar to gi1706967 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3556
ttttttttt tttaattaac aaacctttt tttttttta ttggagatag gaaacagtga 60
agtcccacat accataccct acaagacaca aggtgcgcag acgagccttg gctatgtacc 120
ggcgctgcag gaagaggctg tccgccgggc ctgggctgct ccagctacgc ggggaggcgg 180
ccccattgca aagtgcagtt tctccgcgga ggtgggcggt gggtcagtgg gcagagggcc 240
atggtttcca tgttaaggga agcggacgtg catcttggtc tcaatgtcga tcccctgcca 300
gatcttcagg aagtcctcga aggtgatccc ctcgtacacc tgatcaggct ccatctgccc 360
```

```
catgcacacg ctggccgcct ccatcatggc cccgtcggcg atggagcgag cggactcctt 420 ctcgatgtga gggtttcccg acagcagctc ctcgaccaca tttcgatatt cttccagagt 480 gatgcggccg tcgctgtccg agtcgtacat gtggaacaga aatctcagct tctccttccg 540 ggacagctcc acctgttcct cgtccatggt ggtgtcgatg ggccggaagt aggacatgat 600 ggtcaggaag tcctcgaaat tgatctcatc agccaggcca ctgggtccct tgcgcaggtt 660 cctgttgtcg aaaagccacg aaaaattttg aattcgaggg ggtttacccc caagtgcggg gaattgtta agttcttcct
```

```
<210> 3557
<211> 1116
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(996)
<223> similar to gi184240 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3557 geggeegeeg gegggeeggg eeegegeaca gegeeegeat gtacaacatg atggagaegg 60 agctgaagcc gccgggcccg cagcaaactt cggggggcgg cggcggcaac tccaccgcgg 120 cggcggccgg cggcaaccag aaaaacagcc cggaccgcgt caagcggccc atgaatgcct 180 tcatggtgtg gtcccgcggg cagcggcgca agatggccca ggagaacccc aagatgcaca 240 actcggagat cagcaagcgc ctgggcgccg agtggaaact tttgtcggag acggagaagc 300 ggccgttcat cgacgaggct aagcggctgc gagcgctgca catgaaggag cacccggatt 360 ataaataccg gccccggcgg aaaaccaaga cgctcatgaa gaaggataag tacacgctgc 420 ceggeggget getggeece ggeggeaata geatggegag eggggteggg gtgggeeg 480 gcctgggcgc gggcgtgaac cagcgcatgg acagttacgc gcacatgaac ggctggagca 540 acggcagcta cagcatgatg caggaccagc tgggctaccc gcagcacccg ggcctcaatg 600 cgcacggcgc agcgcagatg cagcccatgc accgctacga cgtgagcgcc ctgcagtaca 660 actocatgae cagetegeag acetacatga aeggettege eccacetaea geatgteeta 720 ctcgcagcag ggcacccctg gcatggctcc tggctccaat gggttcggtg gtcaagtccg 780 aggccagete cageceect gtggttacet ettecteeca etccagggeg eeetgecagg 840 eeggggaeet eegggaeatg ateageatgt ateteceegg egeegaggtg eeggaaeeeg 900 ccgccccag cagacttcac atgtcccagc actaccagag cggcccggtg cccggcacgg 960 ccattaacgg cacactgccc ctctcacaca tgtgagggcc ggacagcgaa ctggagggg 1020 gagaaatttt caaagaaaaa cgagggaaat gggaggggtg caaaagagga gagtaagaaa 1080 cagcatggag aaaacccggt acgctcaaaa aaaaaa 1116

```
<210> 3558
<211> 2990
<212> DNA
<213> Homo sapiens
<220>
```

```
<221> misc_feature
<222> (1)...(2662)
<223> similar to gi3043726 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3558 cggcgcgcgg gcagcgtgaa gcgaggcgag gcaaggcttt tcggacccac ggagcgacag 60 agcgagcggc ccctacggcc gtcggcggcc cggcggcccg agatgttatc tggqaagaag 120 gcggcagccg cggcggcggc ggctgcagcg gcagcaaccg ggacggaggc tggccctggg 180 acagcaggcg gctccgagaa cgggtctgag gtggccgcgc agcccqcgqq cctgtcqqqc 240 ccagccgagg tcgggccggg ggcggtgggg gagcgcacac cccgcaagaa agagcctccg 300 cgggcctcgc cccccggggg cctggcggaa ccgccggggt ccgcagggcc tcaggccggc 360 cctactgtcg tgcctgggtc tgcgaccccc atggaaactg gaatagcaga gactccggag 420 gggccgtcgg accagccggc gcaagcgggc gaaggtagag tacagagaga tggatgaaag 480 cttggccaac ctctcagaag atgagtatta ttcagaagaa gagagaaatg ccaaagcaga 540 gaaggaaaag aagcttcccc caccaccccc tcaagcccca cctgaggaag aaaatgaaag 600 tgagcctgaa gaaccatcgg gtgtggaggg cgcagctttc cagagccgac ttcctcatga 660 ccggatgact tctcaagaag cagcctgttt tccagatatt atcagtggac cacaacagac 720 ccagaaggtt tttctttca ttagaaaccg cacactgcag ttgtggttgg ataatccaaa 780 gattcagctg acatttgagg ctactctcca acaattagaa gcaccttata acagtgatac 840 tgtgcttgtc caccgagttc acagttattt agagcgtcat ggtcttatca acttcggcat 900 ctataagagg ataaaacccc taccaactaa aaagacagga aaggtaatta ttataggctc 960 tggggtctca ggcttggcag cagctcgaca gttacaaagt tttggaatgg atgtcacact 1020 tttggaagcc agggatcgtg tgggtggacg agttgccaca tttcgcaaag gaaactatgt 1080 agetgatett ggageeatgg tggtaaeagg tettggaggg aateetatgg etgtggteag 1140 caaacaagta aatatggaac tggccaagat caagcaaaaa tgcccacttt atgaagccaa 1200 cggacaagct gttcctaaag agaaagatga aatggtagag caagagttta accggttgct 1260 agaagctaca tottacetta gtcatcaact agacttcaat gtcctcaata ataagcctgt 1320 gtcccttggc caggcattgg aagttgtcat tcagttacaa gagaagcatg tcaaagatga 1380 gcagattgaa cattggaaga agatagtgaa aactcaggaa gaattgaaag aacttcttaa 1440 taagatggta aatttgaaag agaaaattaa agaactccat cagcaataca aagaagcatc 1500 tgaagtaaag ccacccagag atattactgc cgagttctta gtgaaaagca aacacaggga 1560 tctgaccgcc ctatgcaagg aatatgatga attagctgaa acacaaggaa agctagaaga 1620 aaaacttcag gagttggaag cgaatccccc aagtgatgta tatctctcat caagagacag 1680 acaaatactt gattggcatt ttgcaaatct tgaatttgct aatgccacac ctctctcaac 1740 tetetecett aageaetggg ateaggatga tgaetttgag tteaetggea geeaeetgae 1800 agtaaggaat ggctactcgt gtgtgcctgt ggctttagca gaaggcctag acattaaact 1860 gaatacagca gtgcgacagg ttcgctacac ggcttcagga tgtgaagtga tagctgtgaa 1920 tacccgctcc acgagtcaaa cctttattta taaatgcgac gcagttctct gtacccttcc 1980 cctgggtgtg ctgaagcagc agccaccagc cgttcagttt gtgccacctc tccctgagtg 2040 gaaaacatct gcagtccaaa ggatgggatt tggcaacctt aacaaggtgg tgttgtgttt 2100 tgatcgggtg ttctgggatc caagtgtcaa tttgttcggg catgtttggca gtacgactgc 2160 cagcaggggt gagctcttcc tcttctggaa cctctataaa gctccaatac tgttggcact 2220 agtggcagga gaagctgctg gtatcatgga aaacataagt gacgatgtga ttgttggccg 2280 atgcctggcc attctcaaag ggatttttgg tagcagtgca gtacctcagc ccaaagaaac 2340 tgtggtgtet egttggegtg etgateeetg ggetegggge tettatteet atgttgetge 2400 aggatcatct ggaaatgact atgatttaat ggctcagcca atcactcctg gcccctcgat 2460 tecaggtgee ceaeageega ttecaegaet ettetttgeg ggagaacata egateegtaa 2520 2580 ctacccagcc acagtgcatg gtgctctgct gagtgggctg cgagaagcgg gaagaattgc agaccagttt ttgggggcca tgtatacgct gcctcgccag gccacaccag gtgttcctgc 2640 acagcagtcc ccaagcatgt gagacagatg cattctaagg gaagaggccc atgtgcctgt 2700 ttctgccatg taaggaaggc tcttctagca atactagatc ccactgagaa aatccaccct 2760 ggcatctggg ctcctgatca gctgatggag ctcctgattt gacaaaggag cttqcctcct 2820 ttgaatgacc tagagcacag ggaggaactt gtccattagt ttggaattgt gttcttcgta 2880

```
<210> 3559
<211> 5906
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(5229)

<223> similar to gill36398 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3559 cggccgcgtc gacctgtgga ctattctgct tggaaggtca gctctgagag agctgagtca 60 gattgaggca gaactgaata aacattggcg gcgattgtta gaggggcttt cttactacaa 120 acctcccagt ccaagttcag ctgaaaaagt gaaagctaat aaagatgtag cttcaccatt 180 gaaggaactg ggtttaagaa tcagcaagtt tttgggtctt gatgaagaac agagtgtgca 240 gttactccag tgttacctgc aagaggacta caggggtact cgggactcag taaagacagt 300 actgcaagat gagaggcaga gccaggcctt aatcctgaag attgcagatt attattatga 360 agaaagaacc tgtattcttc gttgtgtctt acaccttctc acttacttcc aagatgaaag 420 acacccctat agggttgaat atgcagactg tgttgataaa ttggagaagg aactagtttc 480 aaaatacaga cagcagttcg aagagcttta taaaactgaa gcaccaactt gggagacaca 540 tggaaatctc atgacagagc gccaagtgtc tcgctggttt gttcagtgcc ttcgggaaca 600 gtccatgctg ctagaaatta ttttccttta ttatgcatac tttgagatgg cacccagtga 660 cttacttgta ttaaccaaga tgtttaaaga gcaaggattt qqtagtaggc agaccaatag 720 gcacctggtg gatgagacta tggatccttt tgtaqatcgq attqqctact tcaqtqccct 780 catcctggtg gagggcatgg atatcgagtc cttgcataag tgtgctttgg atgacagaag 840 agaactgcat cagtttgcgc aggatgggct tatttgtcag gatatggact gtttaatgtt 900 gacctttggg gacattccac atcatgcccc agtgcttttg gcctgggctc tcctccgtca 960 cactctgaac ccagaagaga caagcagtgt ggtccggaag ataggtggca cagccatcca 1020 gctgaatgtg tttcagtact tgacccgatt gctccagtcc cttgccagtg ggggaaatga 1080 ttgcaccacc agcactgcat gcatgtgtgt ctatggactg ctctctttcg ttctgacctc 1140 gttggagctg cacaccctgg gcaatcagca ggatataatt gatacagcat gtgaagtatt 1200 ggccgaccct tctcttccgg aactgttctg gggaacagag ccaacttctg qccttgggat 1260 cattetggae agtgtgtgtg gaatgtttee ceaeettete teeceaetee tgeaaetget 1320 ccgagccctg gtatcaggga agtccacagc caaaaaggtg tatagcttct tggataagat 1380 gtctttctac aatgaacttt ataaacacaa gcctcatgat gtgatctccc atgaagatgg 1440 aactetttgg eggagacaaa caeceaaaet eetttateee ettgggggte aaaceaaeet 1500 tcgcatacct caaggcactg tgggccaagt aatgttggat gatagggcat acctggtacg 1560 ctgggaatac tectatagea getggaeeet etttaeetge gagattgaaa tgttgettea 1620 tgttgtttca actgcagatg tgattcagca ctgccagcga gtcaaaccca tcattgatct 1680 egtecataag gteateagta cagacetgte gatageagae tgteteetge ceateacate 1740 tegeatetae atgetgetge ageggttaae gaeagtgate teeceaectg tggatgteat 1800 tgcttcttgt gtcaactgct taactgtttt ggctgcccgc aatccagcaa aggtctggac 1860 tgatcttcgt cacacaggtt ttttaccatt tgtqqcccat cctqtctcca qcctqaqtca 1920 gatgattagt gcggaaggga tgaatgctgg agggtacgga aacctcttga tgaacagtga 1980 acageeteag ggegagtatg gggttaetat tgeetttetg egettgatea ceaecettgt 2040 caaggggcaa cttggtagta cccagagcca aggacttgta ccctgtgtaa tgtttgtgct 2100

gaaggagatg cttcccagct accataagtg gcgctacaac tctcatggag tgagggaaca 2160 gattggttgc ctgatcttgg agctgattca tgcgatactg aacctgtgcc acgagacaga 2220 cctgcacage agtcatacte ccageetgca gtttetetge atetgcagee tggcatacae 2280 agaagcagga cagacagtta tcaatatcat gggcattggc gtggacacca ttgacatggt 2340 gatggctgct cagcctcgaa gtgatggggc agagggccag gggcagggcc agctgctgat 2400 caagacagtg aaactggcat tctccgtcac caacaatgtt attcggctga aacctccttc 2460 taatgtggtg tccccctgg aacaggctct ctcacaacat ggtgctcatg gaaacaacct 2520 cattgctgtt ctagccaaat acatctacca caaacatgac cctgctttgc cacgtcttgc 2580 cattcagctg ctgaaacgtc tggccacggt ggccccaatg tcagtgtatg cttgtctggg 2640 caatgatgcg gctgccattc gtgatgcctt cctgacccga ttgcagagca aaaattgagg 2700 gacatgegea teaaaagtea tgattetagg agtteeteae tgttgeaagt agagaeeeag 2760 ccaggcctca tcgaactgtt tctgaacctg gaagttaagg atggcaagtg atggctcaaa 2820 ggaattcagc cttgggatgt ggaagctgtc tccatgcagt ggctgggagc tgattgattc 2880 ccaacagcaa gatcgatact ggtgcccacc cctgctgcat cgtgccgcca ttgccttttt 2940 gcatgctctg tggcaggatc ggagggacag tgccatgctg gtcctccgaa ccaaacccaa 3000 gttttgggaa aatttaacca gtccgctgtt tggaaccctt tctcctccct ctgaaacatc 3060 agagcccagc atcctggaaa cctgtgccct aatcatgaag ataatttgct tggagatata 3120 ctatgtagta aaggggtcat tagaccagcc attaaaggat acactgaaga aattttccat 3180 cgagaaacgc tttgcctact ggtcagggta tgtcaagtca ttqqcaqttc acqtqqccqa 3240 aacagaaggc agcagctgca cctccttgtt agagtaccag atgctggtgt ccgcctggag 3300 gatgettete ateattgeea ceacteatge agatataatg cacetgactg actetgtggt 3360 gcgtcgccag ctctttcttg acgtgcttga tggaaccaaa gcattactcc tagttccagc 3420 ctcagtgaac tgccttcgcc ttggctccat gaagtgcact ctgctgctta tcctcctccg 3480 gcagtggaag agagagttag gttctgtgga tgaaatcctt ggacccttga cggagatcct 3540 ggagggagtg ctgcaggccg accagcaact catggagaag accaaggcca aggtgttctc 3600 agcattcatc acagtgttgc aaatgaagga gatgaaagta agtgacatcc cccagtactc 3660 ccagctggtg ctgaatgtct gtgagaccct ccaagaggaa gtgattgcac tcttcgacca 3720 gacccgccac agtctggcat taggcagtgc cacagaggac aaggacagca tggagactga 3780 cgactgttct cggtcccggc acagggacca gcgtgatggg gtgtgtgtcc tgggcctgca 3840 cctggccaag gagctgtgtg aggtagacga ggatggtgac tcctggctgc aggtaacccq 3900 caggetecee atectaceea ecetecteae caetetagag gtgageette geatgaagea 3960 gaacctgcat ttcactgagg ccacattgca tctgctcctc accctggctc gcactcagca 4020 gggagccaca gcagtggctg gagctggcat cacccagagc atttgtttgc cccttctgag 4080 tgtgtaccag ctgagcacca acggcacagc acagacacct agtgcctctc ggaagtccct 4140 ggatgccccc tettggccag gagtetaccg cetgtecatg tecetgatgg ageagetget 4200 caaaactctg cgctacaact tcctgcctga ggccctggac ttcgtgggtg tccaccagga 4260 geggaeetta eagtgeetea aegeagtgag gaeagtgeag agtetggeet geetggagga 4320 ggcggaccac accgtgggtt ttattctgca gctctctaac ttcatgaagg agtggcactt 4380 tcacctgcct cagctcatgc gtgatatcca ggtcaacctg ggttacttgt gccaggcatg 4440 tacctctttc ctgcacagtc gaaagatgct gcagcattac ttacagaaca aaaatgggga 4500 tggcctcccc tcagctgttt gcccagcgag ttccagaggc caccgtctgc tgcttctgct 4560 geoecetect cetecaagea geoegetget gacacagagg cateagagea geaggeettg 4620 cacacagtee agtatggeet teteaagate eteageaaga egetggeage eetgegeeae 4680 ttcaccccag atgtctgcca gattctgctg gatcagtccc tggaccttgc tgaatacaac 4740 ttcctgtttg ccctgagctt taccactccc acctttgact ccgaagtggc cccctccttc 4800 gggaccette tggccacagt gaatgtggce etcaacatge ttggagaget ggacaagaaa 4860 aaggagcccc tcacccaggc agtggggctc agcacacagg cagaagggac caggacgtta 4920 aagtccctcc tgatgtttac catggaaaac tgcttctacc tgctcatctc tcaggcgatg 4980 cggtacctta gggacccggc tgtgcacccc cgggacaaac agcggatgaa gcaggagctc 5040 agctctgagt tgagcacgct gctgtccagc ctctcgcgct acttccgccg gggagccccc 5100 ageteceetg ceaetggtgt ceteceeteg eegeagggea agtecaeete tetetecaaa 5160 gccagccctg agagtcagga gcctctgatc cagttggtgc aggcgtttgt ccggcatatg 5220 caaagatagg gcagtgctgt tetgeceace tacceetete caccageeta cactgcaece 5280 tggctggcag gggtgctgct ggctgctagg gcctatacaa tggagggcac ctcctgtcac 5340 ccccctcccg gagtagccac gactccagcc accacccact gacgttattt ttatactaga 5400 tgaagaggtc aacagcaggc atggggagcc gagtcttctg tgctcaggtc ctcacgctgc 5460 agacgccccc taaaggaact ttccttcctt tccagcattc cccacatgca ctgccggcca 5520

```
ggggagagge ggcagcccag cagagggete tatgcacggg tttcaaacct gtttccaca 5580 ctctgtcttt gcagtttgg taattctgtg gtctatttat acagatatta aaatcttgtt 5640 tatagacage ctgtgtgatg tttaacttca aagcccaggg atgacaacgt ggctctcaga 5700 acctaggaaa actccctgg gccaggege tgggagtggg gctgcagcet tcgggggaag 5760 ggcaggtact gatggatggg ctagttcacc agcatctcct cattcctgtc cttgggctga 5820 gggtttgget gggtgggcgc tgtcagatat tcccttcctt gggcctgcgc tggtcctgtc 5880 cttgaccctg ctttcattgg cccact 5580
```

```
<210> 3560
<211> 967
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (585)...(889)
<223> similar to gi4226107 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3560 cccagagcgg atgtgagggg cgccgatggc ggagggaacg gcggaggctc ctctagagaa 60 tggtggtggt ggcgactcgg gagccggagc tttggaacga ggagtggcgc ccattaagcg 120 tcaatacctc accaccaagg agcagtttca ccaattcctg gaagccaaag ggcaggagaa 180 gacttgccgg gaaaccgagg taggagaccc tgctggcaat gagctggctg agcctgaggc 240 taagcggatc cgactggagg atggacagac ggcggacggg cagacggagg aggcagcaga 300 gcccggggag cagctacaga ctcagaagag ggcccgggga caaaacaagg gccggccca 360 tgtgaagccc acgaactacg acaagaacag gctgtgtccc tccctaatcc aggagtcggc 420 tgctaagtgt ttcttcggtg atcgctgccg ctttctgcac gacqtqqqqc qctacctqqa 480 gaccaagccg gccgacctgg gcccccgctg cgtgctcttc gagaccttcg gccggtgccc 540 ctacggcgtg acctgccgct tcgctggggc ccacctgagg cccgagggac ttcaccaact 600 acggcctgga gcactggggc tcggacacgc aggggcgtgg agaagacccg gccgctttct 660 gctcgagtgg ctgtccttcc tgtgccggta cgtgcccgtg gggctgctgg agcggctccc 720 acaagaggat caacgagcgg ccqccctact acctqqqccq cqactacctq qaqacqctqa 780 tggccagcca gaaggcagcc gactggatcc gcatcagcga gatgctcctt gggccagtgc 840 eccecagett egeettettg eegaageaca aggeeaaege gtacaagtag eeteaggett 900 tcccaggggc accctggggc gaggagagta caataaattt tattctttta aaaaaaacct 960 cgtgccg 967

```
<210> 3561
<211> 1211
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (24)...(569)
```

<223> similar to gil658503 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3561
ccatcgattc gaattcggca cgaggaagca tgtccctgca tttaggcaat gaagtgtttg
                                                                       60
atgtgtacaa agccccactg cagggcgacc acaatcatct ttttataaga caaggtactg
                                                                      120
gtctacaggg acaagcagtc tttaaaacga aactcacctt cagacctcac tctacggaca
                                                                      180
gtgccacaca tagaaagatg actctgtcac ttgcagatag gtgttcaaag acacagaaga
                                                                      240
ttagaatctt gccaatggct ggtcgtgatc ctgaatgcca acgcacagaa atgattaaga
                                                                      300
aagaagaaga acgtttgagg gcttccatac gtagggaatc tcagcagcgc cgaatgagag
                                                                      360
agaaacagca ccagcggggg ctgagcgcca gttacctgga acctgatcga tacqatqaqq
                                                                      420
aggaggaagg cgaggagtcc atcagcttgg ctgccattaa aaaccgatat aaagggggca
                                                                      480
ttcgagagga acgagccaga atctattcat cagacagtga tgaggggatca gaagaagata
                                                                      540
aagctcaaag attactcaaa gcaaagaaac ttaccagtga tgaggtaaga ccaaatttat
                                                                      600
tcaattctag gggtttatcc tgtactcagg agccaactgc tttgaatgaa gagctcacag
                                                                      660
atcaggcagg cacaaattag ttgtctacac acgtcactga aatccagtga gataaatgca
                                                                      720
gtaacaagac agagtgatcc agaggaggat ctgatacctg tgcttagaga ggtcttagaa
                                                                      780
ggctgcatgg aggataagac ttcttgctgg gtgttgaaga gtgatcagaa gcttgctggt
                                                                      840
caaactgtcc tgtctctggt aggtcactcc ggatagatgg aaaggcctat aatactttgc
                                                                      900
atatggagtc tgcaaaaatc gtgaccatct ttatgttccc catgtcacac tggtccactg
                                                                      960
cattgatgac attatgctga tggtatctga tctgatgagt aggaaataac tccttgcttt
                                                                     1020
gacttccaat tttttccaga tgaagagact cattgttagt tctctaattg tcccttctgg
                                                                     1080
catctgcatc tctctctgga aactgagatt tcatattcct tctcttctcc tctctctgac
                                                                     1140
tgcaatcggg gatattcttt gtaaaagact gacgttgcca cctgcctctc ctcacttcca
                                                                     1200
ctgcactccc a
                                                                     1211
     <210> 3562
     <211> 3029
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3031)...(73)
     <223> similar to gi5419885 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3562
ttttttttt ttaggcgccg tagctgcgtc cccagaaccg ggagacttaa ggcatcttta
                                                                       60
ttgcgggatc ctcacacggc ctcctgggcc cggcgatact catagacgct gccgtgctcg
                                                                      120
ggaaaggcca gtgcttgcgg gggcgacccc ggcggtgggg cggggtcctc cgggtcccca
                                                                      180
tagccaccgc cgccgggcgt gtggagacag aacacatccc cggggtacac ggtcaccgac
                                                                      240
gtcttgccgc ccagattcac cgtccggccg tttttgcgga tcagcaggtt taggccgcgg
                                                                      300
gcgccagget cgccccgtg gagcccgtat ggccggaagg cgcggcgctc ggtcagcact
                                                                      360
gacagcagcg cctcctcacg aaaaagcagc tcgcgggtga cgccgtcgcc gcctcggaag
                                                                      420
cggcctctgc cccccgagcc ccgccgcagc tcgaagcggc gcaggatgac cgggtaccgg
                                                                      480
ctctccagga tctcagggtc ggtgatgcgt gtgttggtca tgtggctgtg cacaccgctg
                                                                     540
```

```
cgcccgtgcc agctgggacc cgcgccgcg ccgcccgcca ccgtctcgta gtagcccatg
                                                                      600
tgggcgttgc ccagggtcac gttgttcatg cagccctggg aggcggcgca ggccccaaag
                                                                      660
gececeagga tgaeateeae eaegegetge gaegtgagea egttgeegee eaecacegee
                                                                      720
gcctcgggcg acgggtccag gatggagcct cggggaatga ccacqcqcac tqqcqccaqq
                                                                      780
cagccctggt tgagtgggat gtcgcggccc accagacagc gcaggcagta gatgagggcg
                                                                      840
gacagggtta cggcccgcgg tgcgttgaga ttaccaaaca cctccggccc agtgccgctq
                                                                      900
aaqtcaaaca cagcgctgcc ctgactcagg ctgatctgca cacggaggcg gatgggggaa
                                                                      960
ccgtcgtcca tgtggtcttc cgaggacacc tccaggggca ggccccgggc ctgccgggag
                                                                     1020
gttccaaagg cacgcaacat gtctcgcacg gccagctcag cgtttgcctg aatatggccc
                                                                     1080
atgtaggeet geaceaegte eaggeegtae tggeecaaga ageteeeca ceagetggat
                                                                     1140
gcccttctgg ttggctgcca cctgggcacg gaggtccgac aggttgtcgt gcaggtttct
                                                                     1200
ggttccgctg cagttgggga ccttgcctgg cgcccgcagg gcctccgtca ccgcctcctc
                                                                     1260
ctggaagacg ccccctgga caagtttgaa ggacagaaag acggcaccct cctgttgcag
                                                                     1320
catggtggag tggggggca tggagccctg tgtgatgccc ccgatgtctg cgtggtgccc
                                                                     1380
tcggctggcc acatagaaca caggccgcgt ctgacccggc caaaacaccg gtgtgataac
                                                                     1440
agtcaggtet ggeaggtgge tgeeceegge aetgggatgg ttgeteagta geaegtegee
                                                                     1500
agggtggaga tcggccccca ggtgctgaat ctggaactgc accgtctcct gcatggcacc
                                                                     1560
caggtgcaca gggatgtggg gggcattgga caccaqcccc ccatcgggcc caaagagggc
                                                                     1620
acaggagaag tecagaeget cettgatgtt ggtggagatg getgtgeget geaggatgeg
                                                                     1680
gcccatctgc tcagcaatgc tcatgaagcg gtgtgagaag atggacagct ggatagggtc
                                                                     1740
cagctggggg cccactgtgc cggggacttc ggccccacg gagatgcaga tgtcccctgt
                                                                     1800
cttggtcacc tctgcctggc aacctggctc caccaggatg gtgctgttac tgtcgatgat
                                                                     1860
gaggcagggc ccatggagct tgtgcccata gcccagctct gccagcaggt acacaggggt
                                                                     1920
ctcctggtag ccccctcaa agtagcactg ggtcatcttg tccacccggg gaggcccggt
                                                                    1980
ctgggctttg ggggcatcct cgaggcgaag accactgcgg ccggtgcccc gcactcgcac
                                                                    2040
atcgtccacg accaccggcc gctcaggtat gacaaagcca aactccctca tgtaccgctc
                                                                     2100
cacaaaggct gggggcagga caggcgggag agcagaggtg gacgtacctg cgtgagtgca
                                                                    2160
cggatgggcc ggcacatggc ctcgttggcc acgcgcacga accccatqqc cacctcctcc
                                                                    2220
aggctcagcg gggaggccgg gcagggcccg ttggtcagga agctgttgac ctcagtggcc
                                                                     2280
acagceteca gggetttgeg ggaggeetea ggggaaagtg gttggttete teceggeeca
                                                                     2340
aaaatgcagg ggaaggaggc aggcagcagg cgacccagga ccagattagc atccgtcact
                                                                     2400
gtcacagggc cccctgggag gtggacaggg tgtggggctt gggggctgga ggcaggggag
                                                                    2460
caggagtagg cagcagggat agggctgaca ggaggggctg ggcctgcggc ggcaaqcqqa
                                                                    2520
gggcaaggcc aggccggcca gatcctgact cttacctttg cggtagcagg cgggtcctgg
                                                                    2580
gtgggctcct gctgactcgg gcccaaccac aaagaggcca gacctgaaga agaggcggga
                                                                    2640
accccctccc gctgccacgg tgttgatgtc cagctgcggg gcctggaggg tgacgccagc
                                                                    2700
tgtgctggcc tcgaagacgt gctcgaattc cccagcatag cgggctcaca tccgtggacg
                                                                    2760
tgcctcccat gtcaaagccg atgacaggct ggccaccctc ctgctggtag gtggtggctg
                                                                    2820
agtagcccac cacgccgccg gccgggcccg agagcacagc actggagccg ctgaaggtgt
                                                                    2880
ccatgggcgc caggccgcca tcggagcgca tgaacaacac ctgcacatcc ttgaqttgqc
                                                                    2940
cctqgaagcc acggcagaag ccctgcacgt agcgctggat ggcgggcgtg aggtaggcgt
                                                                    3000
cggcacaggc cgtqtqcccc cqaqqqacc
                                                                    3029
```

```
<210> 3563
<211> 2007
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(543)

<223> similar to gi5457357 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3563
agggggcctc ttcggtgttg gtgagacagc agccaagatc ttaaaaagca acatcgatgt
                                                                       60
gttatttgca gacgtagctg ggtgcgaaga atcaaattgg aaattatgga atttgtgaat
                                                                      120
ttcctgaaga atcccaagca gtatcaggac ttaggagcaa aaattccaaa gggagccatg
                                                                      180
ctcactggtc ctcctggtac cggcaagacc cttcttgcca aagcaactgc aggggaggcc
                                                                      240
actgtgccct tcatcactgt gaacgggtct gagttcctgg aaatgtttat tggcgttggg
                                                                      300
ccagcaaggg gttcaactct gccaccaacg tcgtggtgtt ggctgqcacc aaccqccctq
                                                                      360
acgtcctgga cccggccctc atgcggcctg gccggtttca tcgccagatt tacactggtc
                                                                      420
ccccttacat taaaggcagg tcctccatct ttaaggtcca cctgcgccca ctgaagctgg
                                                                      480
acaagageet caataaggae accetggega ggaagetgge agtgeteace ceaggettee
                                                                      540
ctgatgtctg tttacatacc aaagttaaaa agctggaatg ttaccaagac tgctttcttc
                                                                      600
tgcccataga cggggatgac tcagcactac ccctcaacag agatgacttt gatgactctg
                                                                      660
cccctcagca gggcttacta agcactaccc cttaacaggg atgactccgc actgccctc
                                                                      720
aacagggatg actcagcagg gatgactcag cactgcccct caacagggat gactcagcag
                                                                      780
ggatgactca gcactgtccc ttagcagtga tgacacagca aggatgactc agcactgccc
                                                                      840
ctcagcaagg atgactcagc actgccgctc aacagacatg actcagggat ggcttagtac
                                                                      900
tgcccctcag cagggatgac tcagcaccgc ccctcaacag ggatgactca gcactgcccc
                                                                      960
tcaacaggga tgactcagca gggatgactc agcactgtcc cttagcagcg atgacacagc
                                                                     1020
aaggatgact cagcactgcc cctcaccaag gatgactcag cactgccgct caacagacat
                                                                     1080
gactcaggga tggcttagta ctgcccctca gcagggatga ctcagcaggg atgactcagc
                                                                     1140
accacccctc aacagggatg actcagcagg gatgactcag cactgcccct caacagggat
                                                                     1200
gactgcaggg atgactcagc actgcccctc agcagggatg actcagcact gccctcagc
                                                                     1260
agggatgact cagcagggat gactcagcac cgcccctcaa caggcatgac tctgcagaga
                                                                     1320
tgactcagca ctgcccctca gcagggatgg ctcagcaggg atgactcagc attgccctc
                                                                     1380
aacagggatg actcagcaga ctcagcaggg atgactcagc actgcccctc aacagacatg
                                                                     1440
actcagcagg gatgactcag caccaccct cagcaaggat gactcagcag ggatgattca
                                                                     1500
gcagagataa ctcggggatg actctgattg tccttcagca gggatgagtc tgttttgctc
                                                                     1560
cgatggaagc atctgtagtg tccatcagca ggtgaatggc caaagtggta tatactgtag
                                                                     1620
tcacattcag ctataaaaag gaataaagta tcgatgcatg ccacaacatg ggtgaaccta
                                                                     1680
gaaaatactg atctaaatgc aagaagccag gcacaaaagg ccacatagta tatgttccca
                                                                     1740
tttatgtgaa atgtgcagaa taataataaa aatgtataga atagcaaatc tgtagggaca
                                                                     1800
gacatgaggt gagtggttgc cagaagtgga aatgggagtt aactataaat tgcacagggt
                                                                     1860
accttacaga gatgatggaa atgtcctaaa actagattat ggcaatagtt gcactacgtg
                                                                     1920
atcagtttat taaaaatcgt tgatgtgtgt gtgtaaaatg ggtggatttt atggtttata
                                                                    1980
aattatacct taataaaggt taacaaa
                                                                     2007
```

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<210> 3564
<211> 1085
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(1088)
<223> similar to gi5882259 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3564
ccagcttgtt ttttggatcg agcactccag ataacaaagt tgctgaacaa gaagacttag
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aaacacagcc aagtccatcc gtagaaaaag cagtgactgt gatagatcct gaaggtacaa
                                                                      120
ttcccaccaa ttttaatgta gctgagaaac cagctgatca ttcattatca gaggtaaaac
                                                                      180
ttaaaactgc tgatgaaccc agaggtactt tagtaaaatc tggtgacggt caaaacgtta
                                                                      240
aagaaaaatc catgatttta tcaaatgtag aagatttaca acagccaaaa ttcatttctg
                                                                      300
aggtgtctag ggaagattat ggaaaaaaag aaatctcagg cgattcagag gaaatgaaca
                                                                      360
taaactcagt agttacttct gctgatggtg agaaccttga aattcaatct tattcactaa
                                                                      420
tcggtgagaa attggttatg gaagaagcca aaactattgt tcctcctcat gttactgata
                                                                      480
gtaaaagagt ccagaagcca gcaatcgctc ctccatctaa atggaatatt tctattttta
                                                                      540
aggaagagcc aagaagtgat caaaaacaaa aatcactcct ttcatttgat gtagtagata
                                                                      600
aggtgccaca acagccaaaa tcagcttcct ccaactttgc aagtaaaaat atcacaaagg
                                                                      660
aatcagagaa accagagtca attattttgc cagtagaaga atcaaaaggc agtttaattg
                                                                      720
atttcagtga agacagactc aagaaagaaa tgcaaaatcc tacttccttg aaaatttctg
                                                                      780
aagaggaaac aaaactcagg tctgttagtc caactgagaa gaaagataat ttggaaaaca
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gattcatata ccttgggcag aaaagaaggt gctggcagaa aaacaaaact ctgtgggccc
                                                                      900
cattagagct tagagatagt aatgaaatag ggaagacaca aattacactt ggatctagat
                                                                      960
ctactgaact gaaagaatca aaagccgatg ctatgccaca acacttctat caaaatgaag
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actacaatga aagacccaaa atcattgttg gttctgaaaa ggagaaagat gaaaaaaaaa
                                                                     1080
aaaaa
                                                                     1085
     <210> 3565
     <211> 2611
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(2612)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (239)...(919)
     <223> similar to gi1871540 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3565
tctcactggg agaaatatca agttaggggt gtggagtgtt attaggaaga aataatcatt
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atgggctaaa agttaagtga ttagaaatta tatatatttg cttttaaaat ttctatttca
                                                                      120
agggettett atgeaaatta tgageettte tagaeagtat ttetggtete etggtttgag
                                                                      180
tgtgaaatta tagccatcac ctgacatgca ttaattctgg attccttttg tgtgtggtca
                                                                      240
gcaataccag gacgtgcccg atgccggagg aaaagagcaa ccccaagggc gtggagtggc
                                                                      300
tgtggcattc cattgttata aggatgtatc tgtccttgat cgccaaaagt gtccgcaact
                                                                      360
acacacaaga agcatcctta ggagctctgc agaacctcac ggccggaagt ggaccaatgc
                                                                      420
cgacatcagt ggctcagaca gttgtccaga aggaaagtgg cctgcagcac acccgaaaga
                                                                      480
tgctgcatgt tggtgaccca agtgtgaaaa agacagccat ctcgctgctg aggaatctgt
                                                                      540
cccggaatct ttctctgcag aatgaaattg ccaaagaaac tctccctgat ttggtttcca
                                                                      600
```

660

tcattcctga cacagtcccg agtactgacc ttctcattga aactacagcc tctgcctgtt

```
acacattgaa caacataatc caaaacagtt accagaatgc acgcgacctt ctaaacaccq
                                                                      720
ggggcatcca gaaaattatg gccattagtg caggcgatgc ctatgcctcc aacaaagcaa
                                                                      780
gtaaagctgc ttccgtcctt ctgtattctc tgtgggcaca cacggaactg catcatgcct
                                                                      840
acaagaaggc tcagtttaag aagacagatt ttgtcaacag ccggactgcc aaagcctacc
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actcccttaa agactgagga aaatgacaaa gtattctcgg ctgcaaaaat ccccaaagga
                                                                      960
aaacacctat ttttctacta cccagcccaa gaaacctcaa aagcatgcct tgtttctatc
                                                                     1020
cttctctatt tccgtggtcc cctgaatcca gaaaacaaat agaacataat tttatgagtc
                                                                     1080
ttccagaaga cctttgcaag tttgccacca gtagataccg gccacaggct cgacaaatag
                                                                     1140
tggtctttgt tattagggct tatggtacat ggcttcctgg aatcaaaatg tgaattcatg
                                                                     1200
tggaagggac attaatccaa taaataagga aagaagctgt tgcattactg ggattttaaa
                                                                     1260
agtttgattt acatttatat teettttetg gtteeeatgt tttgteacte atgtgeacat
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tgcttcgcca ttgggcctcc agtgtattgt tctgcagtgt tgaaacagaa tggaaatgac
                                                                     1380
aagaaatatc tgcagttatc cagggagaaa qtataatggg caaaattatt ggtttctttc
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tttactttgt gcttgttttt atccccttgg ggntgttttt ctctggattt ttaaataaac
                                                                     1500
ttacacttaa gaaatttaga ttaccagagt atgcctgact gtaagaaaaa gaaattgaga
                                                                     1560
ggaagtgatc atagcaaatt aaagaagtct tttcctccca qaacttaaag taaaataaaa
                                                                     1620
aataaataaa taaataaaat cttttccaca gagaaaggca actgtgatga taaaatttaa
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cgttccccca aacactgagt caatgagatt tttctcagga gatactttac ctataacaac
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gccgttaaat ccaaatctct tctaaacgat ggcattctat gtaatgcctt tcctggactt
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ttttggccac tgccctggac tagtgaaaga atggactcta tctttatctg caagaggaac
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taaggcette tateagaetg cetggeeage etggggeact gaaaataegg etcatgttaa
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tgagttacat tatcagccag cccagccttg cccaccattt aagaaatatc acagagccac
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tagatctcat atgatcttct tcaagccatt attttaactc aagaaaactc tagagaagaa
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aagtgaagaa gtcatgttga agaagatgta agaatgtgtc aagaccatcc agaaatgata
                                                                     2100
tgagaaatac tgatatttta aatggttgac atcatccagc gaaatgaatc tacattaaat
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gttgttttaa ctgcgctatg gattaaaacc attcatatag gagttaggtc tttaccaact
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actattctgt tattttttt tttaatctgg acaacatttg tccctaggta ggttagggca
                                                                    2280
aaaaaattct ttcaactcct tttggcgaag aaaactgtaa cagaaaataa attttgaatg
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tgtacttaag tctttattat atttgaaaca atttttttt caattttaaa agctgaatga
                                                                     2400
agacaactta ggttgcctaa cctagttcaa aatgaaatta tttagatacc aatttttaaa
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atactggaga gaatttatat gtctttttcc agagttctga tgataagcat ttggagtgca
                                                                     2520
tttattcctc cagataataa atgtgtgttc agaacttttt gtgtttttta aggcattaat
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aaagccttcg ataatattaa atacaaaaa a
                                                                     2611
```

```
<210> 3566
<211> 5891
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5892)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(1306)
<223> similar to gi4678438 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3566 gtgaatactg ctatgcatga ggcaaaactt atggaagaat gtgacgagtt ggtagagatc 60 atccagcaga ggaagcaaat gatcgctgtc aaaatcaaag agacaaaggt tatgaaactg 120 agaaagttgg cacagcaggt tgctaattgc cgccagtgtc ttgaacggtc aacagtcctc 180 atcaaccaag ctgagcatat cctgaaagaa aatgaccagg cacggtttct acagtctgca 240 aaaaatattg ctgagagggt cgctatggca actgcatctt ctcaagttct gattccagac 300 atcaatttta atgatgcctt tgaaaacttt gctttagatt tttccagaga aaagaaactg 360 ctagaggggt tagattattt aacagcccca aacccaccat ctatccgaga agaactctgt 420 actgcctccc atgacaccat tacagtccac tggatctcgg atgatgagtt cagcatcagc 480 tcctatgagc ttcagtacac catattcact ggccaggcta acttcatcag cctgtataat 540 tcagtagaca gctggatgat tgttcccaac attaaacaga accattacac agtgcatgga 600 ctccagagcg ggactcgcta catcttcatc gttaaagcca taaaccaagc cggcagccgg 660 aacagtgaac ctacccgact aaaaacaaac agccaaccct ttaaattgga tcccaaaatg 720 actcacaaga agttgaagat ctccaatgat ggattgcaga tggagaagga tgaaagctct 780 ctaaagaaga gccacaccc agagaggttt agtggcacag ggtgctatgg ggcagcagga 840 aatatattca ttgacagtgg ctgccactat tgggaggtgg tcatgggttc ctcaacatgg 900 tatgcaattg gcattgccta caaatcagct ccaaagaatg aatggattgg caagaatgcc 960 tcctcatggg tcttctctcg ctgcaatagt aacttcgtgg tgagacacaa caacaaggaa 1020 atgctggtgg atgtgccccc acacctgaag cgtctgggtg tcctcctgga ttatgacaac 1080 canatatgct gtctttctat gacccagcta actctctcca atcttcatac ttttgatgtg 1140 accttcaatt cttccagttt gtccaacatt tacaatctgg aacaaatccc taatgatcct 1200 gtctggcttg cctgccccag attttattga ttaccctgag cggcaggaat gcaactgcag 1260 gcctcaagaa tccccttatg tttctgggat gaaaacctgt cattaagttt caggagagta 1320 tataattcac tggctctcta gttcagcagt tcttcccctc ctacacctaa gttagcgttc 1380 aatatacgag acacaaaata aagtttgttt gaagcatcca aaataactag atattgcaga 1440 tttaattttt gtgcattaaa gcttgtattt gaattaattt attgagtttt tcagaacaaa 1500 ttatctgagt agtctgcgtt caagccattg gagaaaaatt tagaaaatgc ctctgttgtc 1560 attggagaat taaaaattcc caatgattta agaatataaa ttatattgga agcaattagg 1620 gtaattctag ttaaataatg tggaaaggtg ccctgaataa ggagctagca agccagagcg 1680 gggggtggtc agcctttcta gtactggcca gtttggccat gtagaatttt gaacagtgtc 1740 aaattatcac atattatatt ttacttttga tgaaaaccta tcatcaaggg tttgttagga 1800 aaccatgaat gtgtatatgt aatatataaa gtgaacatat atgtacttta tatatattca 1860 cttgtgtatg tatgtttatg catattcact ttatatatta catatacaca aaaaactttt 1920 ttttccaaac accacctcga actagaacaa aaaacttttt aatttgctaa tttgagtgag 1980 aaatatactg gaagggaaaa taagttacac catccatttt tgtcccctaa aggaaacatc 2040 aaaatcaatc aacatttatt tootooctot atocatcatt goottootoo otootgtoac 2100 gcacacatac acatgcaacc atgacacaga taatgggaag agctttattg gattagcaga 2160 gatttacaga caagattgca caagagatgc tgttgctgga tagaaaattg atcaggtaga 2220 agtgatgeta cetacttgag gatggecate tgaattgtta aaaattetgt catagactat 2280 taaaaaaaaa gttttactac tcccaagtac acacagttat gagaattagg cttttaaaaa 2340 gttgcacagt gaaggctctt taggaaccta ctttacttaa tcagtaaaaa ttgagtatta 2400 ttgatgcacc aactattccc atataaatgt acttgctttt tcagataaaa cacttctgaa 2460 gtgctcaaga atgtctgaaa acagtttgtt ttcttaaata ggataaataa tcattccttt 2520 tgcaatcttg tttacagtat tcattctctt agccaatccc tccacgcaaa tggagacaaa 2580 cttcatccca gtcctaacca gtatagttga agggaatgga gccttgtagt ctatgatttt 2640 tttttttaaa tttccatcga agggattggg gatgtcagag agccagagct ttcccctttc 2700 caggagctaa gttggcttcg gaagtcttct gggatttgtg aaaatattac tgttgtaaaa 2760 ttacaaagtg gtagccataa caactccctc agattggaga cttgaaatgt caaaactccc 2820 ctcttccttt cccctagttt ggtggatgct catttattaa ttcattcaat aaactattag 2880 atgccaggta ccaaactact gccatgggag tgcacatatt aacaaaatgc tctacctgct 2940 gccaaatggc ttactattct gtggaagaaa caaagtatat aatcctcccc aataacagtt 3000 atgtattgtt tgttcactta atgtggaagg caagactgat gcagacacac aaggaaggct 3060 caaaaatata aatctagcag caatgtcatc ttttttgatt ttaaatacca tatgtgctta 3120 ctgctaatca ggaaatgaac aacctcagta aaattcatca gtgctggtaa atagtttgct 3180 gtagtggaaa gctcataacc tttggattca aatgatccta gtttctgtac catttattag 3240 cgttgtgacc taggacaagt acctcacttc tctgagcctg tttcctcctc tgtaaaataa 3300 tgtctacttc acaaggctgt ttcaaaggtt aaaaaagata gcatatgtaa actgtcttag 3360

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ctcagcgctt gacatttcct aagtgtgcca taaatattaa tctctttcct tactcccagc
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ccccctcaca ttgattaagg tagccaagtt taactattta cacaactatt cacacaagtt
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aaatttttct taaattaaag gaatagtgtg aaaatgctgt aagtacagaa aatgcaacct
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ccattccagt agaacaattt cctttgcctt gtccttggct ctccaaaact gttcatttat
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tqtqqtqtct tttagatttt agtgccctgg gacaaagatc taatttcccc accctacttt
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tgactctatc ctggactacc tttcctcacc tctatctctc tcaaccagac taactcttta
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tteettagae ttgatgatge atceetettt agagateeaa agacaceeca ageateeece
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tctctcagca ataatcacat tgtatagcag tgtttttcaa agtgtggtcc tcacaccgcc
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tgtgttagaa tcacctttag tgtttgttaa aagaattgat tttgggttcc cactcctgac
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ctaaccagaa tatctgagaa cataggcagg aatttacatt tttgacaagc tcctcatgat
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tctgatgcac caaaaatttt aatgaataat catcttcccc tactagactg aacaccttga
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cattagcttg gctaatgttt attgaatgaa tgtatgaatg aaaaaatgca ttatgaaagt
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ttcctcttgt actctcatgt tcgtagtgat gtttgttact tcctgggcag aaaagcttgg
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tgggggtgcg atgggcccca gatatttact tcagttaact tggcttttat agaatcctqg
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caatgccatg gaccttaaga gaagtaattg gctacctcta gctaaaccca gctggacaaa
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gagaatagga cttgtattta acattttcaa agaaggtgac tgcataagct tttgttgttg
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ttgctctact caacctgttc tccacaactg tttctaccag aagattattt tatgtctgca
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atttatgctt gtttccactt tttatattgt cttattgaag aaagcacaaa aataatcaaa
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aataaagtaa aacctgtttt gagagtatga aagaaatttt aatgccacat tgaggttctg
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gctacttgta agtaagagta actgcatctg gatgtgtttt tattatacaa ttctatgtgt
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aaacactcta ggtgaatttt ctaaacttcc atggtttaca tatttatata tgactaccaa
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gatggagcaa tccacggatg gacttttgaa taaactcaaa tatttgatac tgctttcctc
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caaggaatgg gagagtgtca ggccaggtag gtaaagaaac cactccctaa acttaattcc
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tagctccctg aagccaactg ccagccttgg agccaaatgg tcgtatttgg ctgtgtgtta
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                                                                     5891
```

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<210> 3567
<211> 2174
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (1705)...(418)
<223> similar to gi257387 in the genepept database release 114,
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gagagggcag ttgcagcagc ttctaaccaa gtgtctacaa cacatgtact actgtttcct
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acctgtgtca cctctgcaaa aaatggagct ctgagcccag ttctgtgagc atggtgtcag
                                                                      240
agccctccaa agtcctgaga aatcaatacc agggatccaa atctcagaca ccagtttgaa
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gcaatacctg gataccaaga ctcagagtga ggatatggat tttgggagct gacagttttg
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ctgatcctgc cacactggca ggggctgaag tccagaaatg gtgtgtagct ctagtcattc
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                                                                      540
cttcctggat gaaaagtgag aagagctgtg tcttcacaaa cttcttcaca aatcgqcqgt
                                                                      600
tggtcttgga ggtcagagcc ttacagaagg atctttcttg gaagtggcct tgcccatttg
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cctcccgctt gatataggaa gcataatggc ccacaatctt gacaaagaac tgcacaaagg
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ggcctgaaac atgctcgttg atttgttctg cagtctttaa ctcattgatc ccctgaccaa
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gagagtctaa gatgtcatcc tgaagcttcg gtggcaggat gtctttttca tcaccaaccg
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acattaagaa ggttccttca caaagattga ccagcaggac ctcttccata gggctgtcca
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tgacctcctg ctggaagcgc atttgtactc caaccatgaa gggggtgggg cagcagacgg
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tggccagaag qctctcaggg acaacaggga tgtaqgtgtg cgcccagctg aaggggtaga
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gcagtgcggc agcagcatgg atgcactgag acaaggtgct gagaccttcc gccaggaaga
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tgatttttct ctccagcacg gcagaggcaa agatctgaag tatctgttca aaactgagac
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aaatgaactc agtgcctgag tcggggatga agctcttgag agtgacagtc ttcccaggag
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cagggaaggc tgcctctcgg aggccctgca tgaacgggta gatgacagcc atggagatct
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gatgtctctt ctccacttca tccaggatct tggagaacaa gccgaagcag ccgatgcagc
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tgatgatgca gtacactttg ggaaggcgag ggccagggcc ggcaggcaag aggcgcctgc
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gatactcggt gagtgatgcc cactcattcc catctgggaa gcagaacaag gggatagctt
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tgagcagccg ctcctcctcc tcctgctgac cccgaagcaq qttctcccqc ttqqqaaatt
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ggtaggtgat tataggctcg taatcatcct ctgaacgctt ctttttgaga gaaaccacaa
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gaaggtattc aaagaagtgc tgccccccag caaagttggg caaaqagtgc tcctgggccc
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tttctggttc ctttaaagct tcccctgaat tgtcctgggg tggtcctgaa atcaagccag
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agcccattta gtataatctc attgatccat tcctggagtg gagtctgtga gaatccgggt
                                                                     1860
gacctccaca cetcaaggee geettgeeaa tgetgagata eetggataet ggeeagaace
                                                                    1920
accagtcact caggatcagg gccaaatggg cagtttccac acctgccctg gtagacttga
                                                                     1980
aaccatgggg agccaagcag aggaaagaaa ccactgacac agaagccacg gaaatgtgct
                                                                     2040
ggagaggcca catggaggcc aaggccccag ggtaccaccg agactgccta acctgtcggg
                                                                    2100
tgcttctggc agtcctggaa caatacggcc tgagagttta gttcatacta agtgaataag
                                                                    2160
aacaggctca aagg
                                                                     2174
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<210> 3568
<211> 1435
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1272)...(274)
<223> similar to gi2905643 in the genepept database release 114,
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                                                                      120
acagaagett ctggcatcag cacctgcaag ccctgttcag tcatcattca tqatcqccaa
                                                                      180
atactccttc tggtgttcaa ccagcttcag gaatacttgg tatttcttat catagtattt
                                                                      240
tttattctgg tagtctcggg aacacaactt tcccaacttt gctcattttt gccattgctt
                                                                      300
cctgttacag aagcgaaatc ccctgaggca caggcaccca gaacagcagc accacacaag
                                                                      360
aacggactcc cacctcttgc gacagggacc acaggcatgc cagtaatgtc cgcatgcatt
                                                                      420
tgcacaaaaa gggggattct tggctgaggc ctccacatag gaaaagagta cttgattgag
                                                                      480
tggccctgct gcctccatgg cttctataat gaagcgagtc cccaaagcaa tggcttgaac
                                                                      540
tgttgccagg tagagaatgg caagatcatc aaggtcctga gacagtttca atccqqtgac
                                                                      600
catgcccttt agtgtcagat ctgctaaggg agaccggttg ccatggaaat ctggccaaac
                                                                      660
atgtaaatca acagtaagga aacccacagg ctgagccttc ttaatcagat ccaggtgact
                                                                      720
gttcaaatat gcatatatac tctggcatct ggctgtggcc tttacttgta gttctggaaa
                                                                      780
agcagcatgg ccttgtacca tgtggtctat caattttcca gtaacgctct gaccaccttc
                                                                      840
attcagccag aacccaggta ccatggctga gaaataaggc ccccagacgc ctggtacaaa
                                                                      900
aatcgggtct ttgctgatcc ccatgtgaca agaagacgtt ccacagatga cagccagccg
                                                                      960
tgacgtcact ggctgccct cacagatgag gccgtgccct ctcacatctg ccccaatcac
                                                                     1020
tectagteet cetgeatggg cateaatgag tgaagetgeg acegeaatee cagggagaag
                                                                     1080
gccaaggtct cttgctgcct ctggtgtgag cccatttcca aqaqaaqctc caggaggtag
                                                                     1140
cacttggttt cctattttgc tgtaattatc tgcaacaaag tcttccaaac caatcatttt
                                                                     1200
ccagaaactg tcgtcccagc ctttctctgc tgaatatgtc cacttacaca ccagggagca
                                                                     1260
gagagacctt gtttataatt cagatttttt aaaatgtgat tcagttttct ttcaaaaatg
                                                                     1320
tttatgttgc tgaggctggt ctccatctgc tggcctcaag caatcatcct qccttaqttt
                                                                     1380
tgtgagtagc tgggattaca ggtgtgaggt gagtcgcagt gcctccqcca tctcq
                                                                     1435
     <210> 3569
     <211> 1581
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1582)...(860)
     <223> similar to gi5360111 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
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                                                                      120
atcaaccett gaaaagttta taaaaaacce aaaaccecag aaaatateet teeetcaact
                                                                     180
ctaaggactc ccatatacaa atgcaaaaat tgcctatttg tcaataatca cattaaggtg
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ttgaggttat tgactgaggc aggtaaaaaa ccaatttctg atttttaaat taaattagct

ccagataaaa gcatgttatt ttccacatac gctatctttg tattctgcac agagttccaa

ggcaaagatt gctcctggct ttatggaatt acccagagat ggatgacttg tggtggctg

240

300

360

420

```
acttatcaca gggtcctttt actccttcct tcccggatag atcctttagc ttctttggga
                                                                      480
ggtggcatat ggaattgggt ttcccacgga attggattat aaaaggctgg ttctggatag
                                                                      540
gaatttccac tgtaaaaacc tgtaagtttt ccattggcat aaccatagct ctttgcagct
                                                                      600
ggacgaggtt tatgtttcgc attttccaac cattcttgaa actttttttc tqctatttcc
                                                                      660
tttttctcct gtatttcagc ttgctgttgt ttttctttt cctttttt cttcttc
                                                                      720
tcacattctt cagcattttt tttctttaac cattcttgat atttttcttt tgcttttct
                                                                      780
tgcaagtatt ctttctccag ttcctttgct gctttttcct ccatttcttt attaattttt
                                                                      840
tqttctcttt cttttctttt ttgctcattc tttttctgaa cccattcctt gtgcttttct
                                                                      900
tcagcaatta tctttcttt ttcacgttct tccatttctt ttctttttc tagttgttga
                                                                      960
tttaattcct ctagagcttt cagttgcagc cggtcacgtt cttcttttc tttgccaata
                                                                     1020
aaccacacct cccatggtgt caggcggctt tctggtaagc gcacctgttt ctgttcttct
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tggttatttt ctgattcaac ctgagtgctg gcgcacccct gtaactccat tcctctcagg
                                                                     1140
ctcgccactt tggcctctga atcatgggca tcttcatcca cgtcttcctc atcatccacg
                                                                     1200
tetteeteat ceteceegte accetegtee tegteaaact ggaagetetg gtggecaagg
                                                                     1260
ggagacaaca gcgacctggt ggaattgctg cagctcagcg gcagcggcgg cgacggcgag
                                                                     1320
cgcaccacct ccagcccctg cccacgtgcg cccgtcatag ggactgagca ggagtccgag
                                                                     1380
gagggccgag acctgggtct gcagtcagca gagaaaccgg cgtaggaaga gggaaaagta
                                                                     1440
ggcccccagc gccccgccgg ccacatctgg ccccgccaag ttcaaactgg cggaacccgc
                                                                     1500
ggcggggacg cgcttttcca agcgggccct gggcgccgcc aggccggcca atcccgggca
                                                                     1560
gcacagaccc cgcgttgcca t
                                                                     1581
     <210> 3570
     <211> 6646
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(1761)
     <223> similar to gi3336980 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3570
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                                                                     120
ccaggtcacg ttgtggggca gccagagggt acaggagggg gacttctggt cactcagcca
                                                                     180
ttgatggcca atgggttgca agcaacaagt tcccctctcc ccctcacggt gacatccgtc
                                                                     240
cccaagcagc caggtgtggc acccattaac actgtgtgtt caaatacaac gtcagctgtg
                                                                     300
aaggtggtca atgcggccca gtcgctcctc acggcctgcc ccagcataac ctcccaagcc
                                                                     360
ttccttgatg ctagcatcta caaaaataag aaatctcatg aacagctgtc agctctgaaa
                                                                     420
gggagcttct gtcggaacca gttcccaggg cagagcgaag ttgaacatct cacaaaagtg
                                                                     480
acgggcctca gtaccagaga ggtgcggaaa tggttcagtg atcgtagata ccactgccgg
                                                                     540
aacttgaagg gctccagagc gatgatacct ggagatcaca ggtccatcat cattgactct
                                                                     600
```

660

720

780

840

900

960

1020

gtgccagagg tgtccttctc cccatcgtcc aaggtccctg aggtaacctg cattccgaca

acagccacac tagcaaccca cccttctgcc aaacgacaat cttggcacca gactcctgac

ttcacaccaa ccaaatacaa ggagagagcc cctgagcagc tcagagccct ggagagcagt

tttgcacaaa accetettee tettgatgag gaactggace geetgagaag tgaaaccaaa

atgacccgac gagaaattga tagctggttt tcagagagac ggaaaaaagt gaatgctgag

gagaccaaga aggctgagga gaatgcctct caggaggaag aggaggctgc tgaggatgag

ggtggagaag aggatttggc cagtgagcta agggtctctg gtgaaaatgg ctctctggaa

atgcccagca gccatatett ggcagagege aaagteagee eeattaaaat caacetgaag 1080 aacctgaggg tcactgaagc caatggcagg aacgagattc cagggctggg tgcctgtgac 1140 cctgaggatg atgagtcaaa caaactggca gagcagctcc caggcaaagt gagctgcaaa 1200 aagactgccc agcagcggca cttgctgcgg cagctctttg tccagacaca gtggccaagc 1260 aaccaggact atgactccat catggcccag acgggtctgc cacggccaga ggtggtgcgc 1320 tggtttggag atagcaggta cgcactgaag aacggccaac tcaaatggta cgaagactat 1380 aagcgaggca acttcccacc agggctactg gtcattgccc ctggcaaccg ggagctcctg 1440 caggactatt acatgacaca caagatgctg tatgaagagg acctgcagaa cctctgtgac 1500 aagacccaga tgagctccca gcaggtcaag cagtggtttg ctgagaaaat gggggaggag 1560 accagageeg tggcagaeae aggeagtgag gaccagggee etggtaetgg tgageteaea 1620 gcagttcaca aagggatggg tgacacctat tcagaggtgt ctgagaacag tgagtcgtgg 1680 gagccccgtg tccctgaggc cagctcagag ccctttgacc acatcgagtc cccaggctgg 1740 acgtcagctc gaaacagact gaatttgatc tgattaatgt gaaggactgg ccagtctggg 1800 aaaccgcctg ccacgtggaa gagccaaacc cgactctctg ctgccacatg ccgttcccat 1860 gcccggctgc tgggcacctg ggagagcttc cagaatcctc gcagacagcc cagagcctgc 1920 cgctaccctc ggcctgccca ccaccaagca agcagcaagc aagatggggt tctcatcagt 1980 tottoctocc acaatgtagg acctttoott taccttocaa tggataaaat agttoagagt 2040 tcatagtcat attcatagac acagaatcaa gcttttaaca tatacatcca cctctatatg 2100 ttaaataaaa catcagatta tcaacactgt cattacgtag aaactttggt tagccaagca 2160 gtgcattgtc agttacgtca tctctaaaaa tgacctgtgt ctgttctctg gggattgctg 2220 ggtcacaggt gcccctcacc ttccacagtc aggcagggaa gttataggca caaagctacg 2280 tctggaaccc ctttgtgccc cctttgtgtt cctcaaggaa gcagtacctt tgaagagatc 2340 tctgctgcat taagtgatga ccggctacgt ttcatgtcag gcttgctttg ccttgtgggc 2400 tactcagtgc agaacctgct gtaaccctca gttcaaaaaa tggactggca atgtgattag 2460 cgttggatgc tttaccattc tctttagttg ttaccgtaat tctgcttttt catgggagtt 2520 tgaatcatgg accataactt ttcagttatc agatcaacta aagaaacatt tgttgttaag 2580 cctaatgtgc tgacctatgt gcctgcattt tttttttaat ctagacatgt ttggagtgag 2640 agaaagatgg aaaaaagaca tggggtaggg acgtaagtgg aaatctatag ccacaqcctq 2700 aagctttgac cactgcggtt ttcagagccc tttctccaca ctcatttcag agcctcctat 2760 ggtttgggaa ggaataacac actggcccat tagtaagggt gaaggctgga gggatttgtt 2820 gacttettgg aattateaga ggtagggtgg tetttageae aaagaettge atgeagagat 2880 ccctggcaga acacccagag tgcccgtggc tcccacccca gggtctggcc ggtgtgctgg 2940 atgcatgccc aagggtgctg ggcatcactg gtccttgtga ggatgctttt aaagttttat 3000 atttatgtcc ccaaacttgg aaacaagaac tctactttag cctaaccctc atgtcctttt 3060 ttgaattgag aaaattacag gaaatggtgc ctttgaaaat tagaaaactt gcttacagag 3120 ctgttctaaa tggtaaatcc tcaatttccc caagaccggt tgctctgaga gtagctggta 3180 aagaggggcg aactaaagac ctgtccacct gtagctccgc tcatttctta gaaaccacct 3240 gcttcccaga gtgccaagcc acaagtacca ggcttcgtgg gcacagacac ctcctgggct 3300 gggcagagtg acagtgctag aagaccccag agagaggca agggctttgg gcaagaagca 3360 ctggtggtgt tttagggacc gtccttctcc cctacccagg gaactggacc tggcagggca 3420 ccgtgctcat gtggctccaa ggacaagcat ggcggtggcc ccttctgcct tccaggagag 3480 gtcttgcttt tgaaaccaaa atcatgttct tctaaagtgt catcttctgc cctccctgtc 3540 ccaataggga ccacatctta tttgtctcaa acagggactt gtgagtactt ggcaagtttt 3600 gcagcctatt tttgtattct taatttgggg agtaaagatg tttggtctca aaaacctttg 3660 aggaattgcc aagaatggcg agtgattgct ttccttcaga gaacagacac ttggaatttc 3720 teettttagt gtttatatae gtgeagatta atttatatat atatatatae acacacacat 3780 atacagtata aatactcatt tgattctcgt aaaacgcgca tctggcgtgt gcagttgaga 3840 aacttggtgg cacatgggtg ttgggggagt agcctgtgtt ggagggacac cagtgcacta 3900 ggcagctggg gcggcccagg ctgaagccat ctccgggtgt ctgagaaacc acccagtgcc 3960 tcacctccag atcctgctgg catcacctcc agagecetge atgcactgge tgaagagttg 4020 gtctgtggag aggattttct tggttacttg tattcacggt taatttacaa cccaaacagc 4080 aaaacacagt tggtggacaa gttcatgcag gacctacagt gacccagcca tgggcactag 4140 ctcatctttc aggtggaaaa gtacagtgct gcctgccctg gtatgttttt cttatagatg 4200 ttagccctgc ccaacagcca gggctacact acaaaaggca agaatgccca tgtaaggagc 4260 ccagcagtct ggacagatcc ttcttcctct gctgttggat gagagtgagt gagtatggtc 4320 tggaccttat ccttgaaaga tgatcaaaag cgatgatgag ggaggcagtc atcacgcagg 4380 tgcttaaagg gacattgtag gaggtactca agggtttggg ggcaaaaccc tgaatccagc 4440

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cagtcgtgca cagagacaca cccacactag cccagtggca gtgggggatg tgggatgqca
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gcagccaggt atgtagccct gtcacaggac agctcactgt ggttttgcac actgcctaag
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ggttaaattg tgttgttgcc ttcagtagaa ggcatttgtg ggctgcagag ttgagagttg
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ggtgaggtta gtctctcctg aagaaaaagc ctataaaaag tggctaatct tatccctttt
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ctctgtatgc agttggactc gtcagagata gtaaaatcat cttttagtgt ttttttgttg
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acccagette etteteet tttacetgag ageacagace teteteagee ageetgeeca
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gtctgagcaa atgggcagtt gtggagctca agcctttctc ctgtgctcaa gtcccttccc
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cggcagggac atggttgggc catgccacac cagggctggt gaggcaacca gttttgattt
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tttacctgcc attagtgcct cttccttcag gagactggct tgaaacgtgt gttcatgtgc
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gaaggagaat cacttgaacc cgggaggtgg aggttgcagt gagctgagat cgtgccctg
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                                                                   6646
```

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<210> 3571
<211> 2192
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2193)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2192)...(802)
<221> misc_feature
<222> (2192)...(802)
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                                                                      120
gcttctggga cctggcacta agggagcacg ccgcggtcaa ccaqaaaqqa atttatqatq
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attggatcag atgttttcag atgcctttag taaagatcac cagctgcttc gggcagaccc
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caaacacagt ctttacctcg cctgtgcact catggttaga ggaaatgtac aaatttcaga
                                                                     1080
tcttcgtaga aatattgaaa gattaaaacc atctctacaa tttgtctcct ggaatcaaga
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ttgatattct atttaagtta tcctgattct ttaaaagtag gttaattggg agtaggagga
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                                                                     1980
tectaatttg tacaettaae atgtatttgt attaaaettt ttaaataatt getttettat
                                                                     2040
caaaccaatt gattttataa taaatgtcta tatttttcaa cagtgctact tgttattgtt
                                                                     2100
ctgcatgaca tttatgcaaa tgaacagaat gttactaagc ttgatatctt ccaaactttg
                                                                     2160
caataaatgg ctataattgt tccggttact at
                                                                     2192
```

```
<210> 3572
<211> 1504
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (25)...(1130)
<223> similar to gi577843 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3572
ccactgatga cccttagtca gtgcggtgga attcccggcc acggccactc gcacggggt
                                                                        60
cacggccacg gccacggcct ccccaagggg cctcgcgtta agagcacccg ccccgggaqc
                                                                      120
agcgacatca acgtggcccc gggcgagcag ggtcccgacc aggaggagac caacaccctg
                                                                      180
gtggccaata ccagcaactc caacgggctg aaattggacc ccgcagaccc agaaaacccc
                                                                      240
agaagtggtg atacagtgga agtacaagtg aatggaaatc ttgtcagaga acctgaccat
                                                                      300
atggaactgg aagaagatag ggctggacaa cttaacatgc gtggagtttt tctgcatgtc
                                                                      360
cttggagatg ccttgggttc agtgattgta gtagtaaatg ccttagtctt ttactttct
                                                                      420
tggaaaggtt gttctgaagg ggatttttgt gtgaatccat gtttccctga cccctgcaaa
                                                                      480
gcatttgtag aaataattaa tagtactcat gcatcagttt atgaggctgg tccttgctgg
                                                                      540
gtgctatatt tagatccaac tctttgtgtt gtaatggttt gtatacttct ttacacaacc
                                                                      600
tatccattac ttaaggaatc tgctcttatt cttctacaaa ctgttcctaa acaaattgat
                                                                      660
atcagaaatt tgataaaaga acttcgaaat gttgaaggag ttgaggaagt tcatgaatta
                                                                      720
catgtttggc aacttgctgg aagcagaatc attgccactg ctcacataaa atgtgaagat
                                                                      780
ccaacatcat acatggaggt ggctaaaacc attaaagacg tttttcataa tcacggaatt
                                                                      840
cacgctacta ccattcagcc tgaatttgct agtgtaggct ctaaatcaag tgtagttccg
                                                                      900
tgtgaacttg cctgcagaac ccagtgtgct ttgaagcaat gttgtgggac actaccacaa
                                                                      960
gccccttctg gaaaggatgc agaaaagacc ccagcagtta gcatttcttg tttagaactt
                                                                     1020
agtaacaatc tagagaagaa gcccaggagg actaaagctg aaaacatccc tgctggttgt
                                                                     1080
gatagagatt aaaaacatgc ccaaacaaac caacctgaat catctttgtg agtccttgaa
                                                                     1140
aaagatgtgg atatttgaac ttttgcttta aactgcaaga ggaaaaagac tcccactgaa
                                                                     1200
attectaagt ttgeecaagt agtgtaattg aagteettgt etggteacae agtttaatte
                                                                     1260
tatttttgta agaacataat gggactgcat aacagagttc tatattacaa ttttgtgatt
                                                                     1320
attagtacag agtacagcta tgctgtgact gttttggaaa gccgagtttt aacactatgt
                                                                     1380
tacatttttg tttaaagtaa gttaaacctt atataacata atgacatttg atttctggat
                                                                     1440
ttttcccatg ataaaaatta gggggataaa taaaattgtt actggaattt ctctgcaaaa
                                                                     1500
aaaa
                                                                     1504
     <210> 3573
     <211> 1309
     <212> DNA
    <213> Homo sapiens
     <220>
    <221> misc feature
     <222> (1)...(1310)
    \langle 223 \rangle n = a,t,c or q
    <220>
    <221> misc feature
    <222> (1309)...(173)
```

```
<400> 3573
ttttttagct tgttatgctt ttttttttt cccaaagcac tttaatgcat tcaccaaccc 60
```

<223> similar to gi3928166 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

```
acagtocotg coogctggot gggcaagaga ggccagcoco catotggagg otoctatggo
                                                                      120
ttcccacacc tagtgtgtcc aggaaggctg agcccgcaca cattcccatc aataggtgag
                                                                      180
gggcgtgaga atgaagaggc ggtcttcctc tttgcggatc cagcgcatca gcttatggat
                                                                      240
ggcactgacg gctgacgcct tggtccccag ggggctcgta acacatgtag agctcaaagg
                                                                      300
cgcctgtcac ccaggccagg gaggttctcg ttgcgggccc gtgtagtaaa ttggtcttga
                                                                      360
gtggggcgag aggcattgtg ggcacgactg tgcaagtact ggtagaggcc cagcagccgc
                                                                      420
tcctgctcct cttcactggt gtatggggcc tcaatctcag ggctggtgaa gagtcccgag
                                                                      480
ctctttgact tatagaggaa gtgacgcagg tcagggatgc ccacttgggc aacqctgtag
                                                                      540
tagggtgtgc gcagtgcctc tcgcagggcc aggtgggctc cgcgcttgcg aaggcgctcc
                                                                      600
tggaagcggc ggcggcagtc agagactgca aagaagtcct cacggtcagt ggagacaagc
                                                                      660
agcaggcaga ggtcagtgtc aggctctagg taagagatgt gtgcgtggaa gaagccggct
                                                                      720
gcgttgaatt tgggcaggca cacgggcgtc caggcctcgc cctcgcgaaa ggacqaqqaq
                                                                      780
qaactaatga ggttgaagag caggtgcagg tcgatggggt gcagaaattg gtcctttcgg
                                                                      840
cgcacgagtg ccacgagctg gttgcgggcc agcaggatgg agaagaccag gctgcgcgca
                                                                      900
cgcgcctgct gcaggctggc gctcacagtg tcgcgcacgg ccgccgccag gggcaggcac
                                                                      960
cgtgccgccc ccatcaggaa gctggggtct cgtgccatga gctgcagcag gttgtcggtg
                                                                     1020
atgcgctctg agcccgagag taggcgccgc aaatcatagt tctqcttctg ctggaaqatg
                                                                     1080
tggctcagct gcgcaccggt aagaaggctt aggatctggt agtagatgta gagcagctcc
                                                                     1140
tgcgccagct cttgtgccga ctgccgcgta cgagccaccg ccactagcac cagcgggctc
                                                                     1200
cggcgcacga atactacctt gtagccatct ggctccattc cctgaattcc tccgcnctgt
                                                                     1260
ctaagggtca tctatggggn ntctatnngg gggggggggg gggggggg
                                                                     1309
```

```
<210> 3574
<211> 1445
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(733)
<223> similar to gi3043740 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3574
ggaattccag cagcagacag aagaagccag tctggagctt attaaactqq acatttctaq
                                                                       60
aacatttcct aatctctgca ttttccagca aggtggtcca tatcatgaca tgttgcacag
                                                                      120
tattttgggc gcttatactt gttaccggcc agatgtgggt tatgtccagg gcatgtcctt
                                                                      180
catagcagca gtgttgatct tgaacttaga tactgcagat gcctttattg ccttttctaa
                                                                      240
ccttctgaat aaaccctgtc aaatggcgtt ttttagagtg gaccatggcc ttatgttgac
                                                                      300
ttattttgct gcatttgaag tattctttga agaaaatttg ccgaaattat ttgcgcattt
                                                                      360
caagaagaac aacctaactc cagatatcta cctaattgat tggatcttta ccttatatag
                                                                      420
taaatctctg cccctcgacc tggcctgtcg tatctgggac gtgttctgtc gcgatgggga
                                                                      480
agagtteetg tteegeaegg eeetgggeat eetgaagetg ttegaggaea teetgaceaa
                                                                      540
gatggacttc attcacatgg cccagttcct gacccggctg cccgaggacc tgcccgccga
                                                                      600
ggagctgttt gcctccatcg ccacgatcca gatgcagagc cgaaacaaga agtgggctca
                                                                      660
ggtactgact gcattgcaga aagacagccg ggaaatgaga gaagggaagt ccgtcctcc
                                                                      720
gacactgagg ctgcagcggg aattcgcact cggcaccaat cagagcccca tgccgcggcc
                                                                      780
cctctgttgt ttcagactga cacccgggca gccgagaaga acagacgctc tttaagtttg
                                                                      840
attectaaca etggagttgg eettaaacaa aacaaacaca aaaactttta aagaattaaa
                                                                      900
ccaaggetta geettaagea geteagtgga aggatgaget getgeggaee acageeagee
                                                                      960
```

```
actgcatctg ctgcacagtt gaacgatggg cagtggctca cccccactcc tttatttcag
                                                                     1020
caaaagctaa ttaaattgta atgtttctat gtcaactact gggaagtatg ttacagtctt
                                                                     1080
agccaggatg catgagagat gttatttggg agacttgaga tgctttggct gatatttaca
                                                                     1140
tgttttcgat aagaaaggga tcgctgattg agttattgag atagtttttc cagagctgga
                                                                     1200
ggtcacgttt ctaaaactca cctacgaaag atagcattaa aggaacaggg gctctctgag
                                                                     1260
gatggccact gatgtgttt tgtggatacc tgggcatcga cccaqcctgc aggtgagctc
                                                                     1320
tgggccatgt tgccttgaca cagtcacagt gtagaggctg caggtgcaca cgtgggctcc
                                                                     1380
agtgggactg cgctctggga gactgctccc tggcatcggt cctgcggagg tggaaagttc
                                                                     1440
gagag
                                                                     1445
```

```
<210> 3575
<211> 1610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (430)...(1216)
<223> similar to gi886024 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters

<400> 3575
```

gcctcctcct cagctcgcct ggcttctcac ttaggcgtgt gctttcgctt tgcagcaaaa 60 gctgctgctt ttcgcatcta aattcttgct ctgaaggtgc caagaacctg gaaaccggct 120 gggagtgggg tctcaccagc ctttggagac cctcctgagc cgtctggcaa ccagtgacga 180 tacagagetg caeggaacgt catgaaggac caaegeetgg ttttccatag taaagttagg 240 tcatctggtt atgcgtcagc accacatgta actatgtttt caccaaagac caacatcaag 300 agtgagggga aaggatette aaggageagg ageagetgeg eaegggagge atacceegtg 360 gagtgcgctg tgcccaccaa gcccggcccc caggtcgctg ccgcccccac ctgcacacgt 420 gtatgctgca tccagtactc aggagatggg cagtggctgg cctgtgggtt ggccaaccat 480 ctgttactcg tttttgatgc cagcctgact gggacacctg ctgtgttttc aggtcacgac 540 ggggcagtga atgccgtgtg ctggagccag gaccggaggt ggctgctctc tgcggcccgg 600 gacgggaccc tgcgaatgtg gtcggctcgt ggggcagagc tcgcactgct tctgatataa 660 acagaagagc aagtccaagc tgatttgcag gctctccacg acgggtgcag tagacatgac 720 caqtttatcg gcagtcaacg acttttattc ccacatcgta ctcgcagctg gccggaacag 780 gaccgtggaa gtgtttgacc tcaacgccgg ctgcagtgca gcggtgatag tggaagccca 840 ctcacggcct gtccatcaaa tctgccaaaa taaaggttca tcatttacaa cccaacagcc 900 tcaggcttat aaccttttcc tgaccacggc cattggcgat gggatgagac tgtgggacct 960 gagaaccetg aggtgtgage gecaetttga agggeateea accegegget atceatgtgg 1020 aatcgctttc agtccttgtg gacgattcgc ggcttgtggg gccgaggaca gacacgctta 1080 cgtgtatgaa atgggctcaa gcacgttttc tcaccggctg gctgggcaca cagacactgt 1140 cactggagtg gccttcaacc catcagcgcc ccagcttgcc acagctacct tggatggtaa 1200 actccagctc tttctagctg agtaaccact gacctgtgag ctgggtccag gaatgctgtg 1260 aggaacaact taaaagtaag aagtagtggt tcatccatca gggggccaga agcagcaact 1320 gtttttcata ttttgagact tgcctcagat ttcccccgtt tgcaagctcc tcccctctgt 1380 gtgtgccatg tcagagtttt atgtctttct gctcctcaaa agggatcccc cttcattggg 1440 aaaatggaaa tggcgtccag tacttctgca cagaatttgg taaagttaaa acaaaatatc 1500 tttcaataaa acataatata gtatttgttt gataattaga gttggaagaa aaaagagaga 1560 atttcttttg ggcagtgaaa ataaaqcaqt taacaqtcaa aaaaaaaaaa 1610

```
<210> 3576
     <211> 803
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(804)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (611)...(383)
     <223> similar to gi34203 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3576
cttctccggg tcgacccacg cgtccggcag aatcctattt ccaggaggag gactgtatcc
                                                                       60
ttttcttaat tacaggaaga aatttttaga actcttacag aaccattcat ttttttaatt
                                                                      120
qaagtatatt ttacatgtaa tagaatgtac agatcatatg gtttcagtgg ttttgacagt
                                                                      180
tgtatgtacc cgtgtaacca cctcagaaag caaaatgtag gaaatttctg tctcttcaca
                                                                      240
aaatttoota gaaccatooa aagtttaoot toataaatag goottaattg taotaaaata
                                                                      300
agtatttgta tttatttttt gaaggaaaat ttgtattatt ttaattattt ttatgtacag
                                                                      360
aacactcaac agtgtacatt taacccagtt tagcggcatg ttctttagcc tttgcctttt
                                                                      420
tgagcttggc aacgtgcgcc acagacttgg gacccgggac attgccgccc ccgtgatggt
                                                                      480
gaatctcgtc gtatctgtcg ttgtaattgg tcctggacta gacagcccag tcttgccttc
                                                                      540
cccttggata atgcagtaag ggacccccat tttacgacat agggcaggca agaagacagc
                                                                      600
cagctggaag aaggcattag tggaagagtg tattttgacc aaaagcagta aatctcaaag
                                                                      660
ctagcttggt agcaagcgag agagagaga cttctgagtg atcatgaaga caaaaagctg
                                                                      720
aacagtgagt ttttctcttc cttttttctg ggncagcatt tagagcattg cccaqaggaa
                                                                      780
ggtaggcagt tggacagtgt att
                                                                      803
```

```
<210> 3577
<211> 1302
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (34)...(669)
<223> similar to gi3806122 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3577
gagtacatta gtccagtgcg gtggaattcg cgcggcgtca agtgcgtgct ggtcggcgac
                                                                       60
ggcgcggtgg gcaagacgag cctggtggtg agctacacca ccaacqqcta ccccaccqaq
                                                                      120
tacatcccta ctgccttcga caacttctcc gcggtggtgt ctgtggatgg gcggccgtg
                                                                      180
agactccaac tctgtgacac tgccggacag gatgaatttg acaagctgag gcctctctgc
                                                                      240
tacaccaaca cagacatett cetgetetge tteagtgteg tgageceete ateetteeag
                                                                      300
aacgtcagtg agaaatgggt gccggagatt cgatgccact gtcccaaagc ccccatcatc
                                                                      360
ctagttggaa cgcagtcgga tctcagagaa gatgtcaaag tcctcattga gttggacaaa
                                                                      420
tgcaaagaaa agccagtgcc tgaagaggcg gctaagctgt gcgccgagga aatcaaagcc
                                                                      480
gcctcctaca tcgagtgttc agccttgact caaaaaaagc cctcaaagag gtctttgatg
                                                                      540
cagccatcgt cgctggcatt caatactcgg acactcagca acagccaaag aagtctaaaa
                                                                      600
gcaggactcc agataaaatg aaaaacctct ccaagtcctg gtggaagaag tactgctgtt
                                                                      660
tcgtatgatg ctggcaagac acccagaaag gctattttca gatgaaatcg atattagaag
                                                                      720
ctatattagc tgaaacaact ccttttactg cgtagaacct atatcgagag tgtgtgtata
                                                                      780
tgtattatag gaggagccct caattttatg tattctttct gcctttaatt ttcttgtttg
                                                                      840
tttgagctta gggatgagat acttatgcaa gatatttttg aagtaaatta aacatttttc
                                                                      900
acatctctgg aaatttagag ttctagacct ctggttaatt tatatctaat atgaagaaga
                                                                      960
cacctctaat ctggatgtta agaatgaagt tctgctacat tataatgtac agaagagcaa
                                                                     1020
aagggaggaa cactatggtt aaccetetet tgattaaggg ctacttaatg cacagtgcat
                                                                     1080
tatgtacaca ggtcaaccat ggtaacaata gttcttagct ttgaaactcc atgcaaacca
                                                                     1140
tgcctttttt ttaaggagca aaaatctgag aaaaaaagtg agagacctct gcctacaaaa
                                                                     1200
cttcaaacca gtcacttttg tcaattgctt aattacccag ttacttatga tttaaaaaca
                                                                     1260
accaacagaa aacatcccac agactgtatg gcactctgta gt
                                                                     1302
    <210> 3578
    <211> 3466
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1) ... (3173)
    <223> similar to gi4314432 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3578
gagccaaggg agtccaggct gccgggggct gcagacatgg agggccagag cagcaggggc
                                                                       60
agcaggaggc cagggacccg ggctggcctg ggttccctgc ccatgcccca gggtgttgcc
                                                                      120
caaactgggg caccctccaa ggtggactca agttttcagc tcccagcaaa gaagaacgca
                                                                      180
gecetaggae eeteggaace aaggttgget etggeacetg tagggeeacg ggeagetatg
                                                                      240
tcagcttcct cggaaggacc gaggctggct ctggcatctc cccgaccaat cctggctcca
                                                                      300
ctgtgtaccc ctgaagggca gaaaacagct actgcccacc gcagctccag cctggcccca
                                                                      360
acatctgtgg gccagctggt gatgtctgcc tcagctggac caaagcctcc cccagcgacc
                                                                      420
acaggeteag ttetggetee gaegteeetg gggetggtga tgeetgeete ageagggeea
                                                                      480
agatetecee cagteaceet ggggeecaat etggeeceaa eetecagaga ecagaageag
                                                                      540
gagccacctg cctccgtggg acccaagcca acactggcag cctctggcct gagcctggcc
                                                                      600
ctggcttctg aggagcagcc cccagaactc ccctccaccc cttccccggt gcccagtcca
                                                                      660
gttctgtctc caactcagga acaggccctg gctccagcat ccacggcatc aggcgcagcc
                                                                      720
tetgtgggae agacateage tagaaagagg gatgeeecag eeectagace tetecetget
                                                                      780
```

840

tetgagggge atetecagee tecageteag acatetggte etacaggete eccaeeetge

```
atccaaacct ccccagaccc teggetetee cecteettee gageeeggee tgaggeeete
                                                                      900
cacagcagcc ctgaggatcc tgttttgcca cggccacccc agaccttgcc cttggatgtg
                                                                      960
ggccagggtc cttcagagcc tggcactcac tcccctggac ttctgtcccc caccttccgg
                                                                     1020
cctggggccc cctcaggcca gactgtgccc ccacctctgc ccaaqccacc ccqatcaccc
                                                                     1080
agccgttccc caagccactc cccgaatcgc tctccctgtg ttcccccagc ccctgacatg
                                                                     1140
gccctcccaa ggcttggcac acagagtaca gggcctggca ggtgcctgag ccccaacctt
                                                                     1200
caggcccaag aagccccagc cccagtcacc acctcctctt ctacatccac cctgtcatcc
                                                                     1260
teceettggt cageteagee tacetggaag agegaeeeeg getteeggat caetgtggte
                                                                     1320
acatggaacg tgggcactgc catgccccca gacgatgtca catccctcct ccacctgggc
                                                                     1380
ggtggtgacg acagcgacgg cgcagacatg atcgccatag ggttgcagga agtgaactcc
                                                                     1440
atgctcaaca agcgactcaa ggacgccctc ttcacggacc agtggagtga gctgttcatg
                                                                     1500
gatgcgctag ggcccttcaa cttcgtgctg gtaacgcacc cctcaccccc tggacagcca
                                                                     1560
gagaccetge tgaatteetg geteeagetg taccetgget caetgtgggg ceegetggge
                                                                     1620
ctctgtggct gggtgagttc ggtgaggatg cagggtgtca tcctgctgct gttcgccaag
                                                                     1680
tactaccacc tgcccttcct gcgagacgtg cagaccgact gcacgcgcac tggcctgggc
                                                                    1740
ggctactggg gtaacaaggg tggcgtgagc gtgcgcctgg cggccttcgg gcacatgctc
                                                                     1800
tgcttcctga actgccactt gcctgcgcat atggacaagg cggagcagcg caaagacaac
                                                                     1860
ttccagacca tcctcagcct ccagcagttc caagggccgg gcgcacaggg catcctggat
                                                                     1920
catgagtatg ggctgggcct cgtgttctgg ttcqqqqacc tqaacttccg cattgagagc
                                                                    1980
tatgacctgc gctttgtcaa gtttgccatc gacagtgacc agctccatca gctctgggag
                                                                    2040
aaggaccage teaacatgge caagaacace tggeccatte tgaaqqqett teaqqaqqqq
                                                                    2100
cccctcaact tcgctcccac cttcaagttt gatgtgggta ccaacaaata cgataccagt
                                                                    2160
gccaagaaac ggaagccagc ttggacagac cgtatcctat ggaaggtcaa ggctccaggt
                                                                    2220
gggggtccca gcccctcagg acggaagagc caccgactcc aggtgacgca gcacagctac
                                                                    2280
cgcagccaca tggaatacac agtcagcgac cacaagcctg tggctgccca gttcctcctg
                                                                    2340
cagtttgcct tcagggacga catgccactg gtgcggctgg aggtggcaga tgagtggtg
                                                                    2400
cggcccgagc aggcggtggt gaggtaccgc atggaaacag tgttcgcccg cagctcctgg
                                                                    2460
gactggatcg gcttataccg ggtgggtttc cgccattgca aggactatgt ggcttatgtc
                                                                    2520
tgggccaaac atgaagatgt ggatgggaat acctaccagg taacattcag tgaggaatca
                                                                    2580
ctgcccaagg gccatggaga cttcatcctg ggctactata gtcacaacca cagcatcctc
                                                                    2640
atoggoatca otgaaccott ocagatotog otgoottoot oggagttggo cagcagoago
                                                                    2700
acagacagct caggcaccag ctcagaggga gaggatgaca gcacactgga gctccttgca
                                                                    2760
cccaagtccc gcagccccag tcctggcaag tccaagcgac accgcagccg cagcccggga
                                                                    2820
ctggccaggt tccctgggct tgccctacgg ccctcatccc gtgaacgccg tggtgccagc
                                                                    2880
cgtagcccct caccccagag ccgccgcctg tcccgagtgg ctcctgacag gagcagtaat
                                                                    2940
ggcagcagcc ggggcagtag tgaagagggg ccctctqqqt tqcctqqccc ctqqqccttc
                                                                    3000
ccaccagetg tgcctcgaag cctgggcctg ttgcccgcct tgcgcctaga gactgtagac
                                                                    3060
cctggtggtg gtggctcctg gggacctgaa tcgggaggcc ctgqcqccca acaqcctqtc
                                                                    3120
tcctagtccc ccagggccca tcgggggctg gaggaagggg gcctggggcc ctgagggtgg
                                                                    3180
ggtaggcaga tgggccaagg tgaccaccat tctgcctcaa tcttttgcaa gcccacctgc
                                                                    3240
ctctctcctg ctgctcctcc agctgtatct gcacctgcct ctctgtcctg gccaggggtg
                                                                    3300
gacaactggg gtcccccaaa actcagtcct ggcacctcaa ctgtgacaat cagcaaagcc
                                                                    3360
ccacccagge ecceatetgg gatgatggga gagetetgge agatgteeca atectaaagg
                                                                    3420
aggtcatcca ttaggaaaaa aattctacca gacctcaaaa aaaaaa
                                                                    3466
```

```
<210> 3579
<211> 1900
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1901)...(119)
```

<223> similar to gi4530577 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3579
ttttttttt ttgtgattat acgttttatt agactcggga ggggtatggc agggcttcat
                                                                       60
cagtgttcct tcaaattaaa aaaaaaatac aaaagctacg tagaaaacgt cagatcagac
                                                                      120
gactaaactt tcccgactca gggccaagtt cttcttgagc ctgcgctctc gggacgcctg
                                                                      180
egagteggte teegagtaeg ggggeggege gggegggtag taggeetett ceteeteete
                                                                      240
cttgtggggt ctcctctct cctccgaccc cttcttcctc acagcctcct ccagtagccg
                                                                      300
cccatcatag gggaggtccc cggacctgga gccgttgtcc cgagggtccc gggtacggtg
                                                                      360
gtggtgggac ctggggtcgg caggagggcg ctcccgagac ctgaagtcgt cgtagtgggg
                                                                      420
gtcccgggag cgtgggaagt ccctcgagtc gtcttggtca tagaggtcgt cccggctgcg
                                                                      480
gctccgcggg ggcatgtagg cccggcttct cctcccacca ttactcgtgg gagacctgct
                                                                      540
ccctgactcg gcggtgcctc gggcggggtg aggtcgtcca gggcgtccac gggagcgggc
                                                                      600
ccqgggccgc ctggcccgcc agcccccgc ttgcctgctc cctggcgggc tcctggtccc
                                                                      660
atcccctggg actccggggg gagtggccac cccactcctc atcccggatc ggggtgaggg
                                                                      720
cagggccccg ggaaggccga gatcgccagt cqtcctcqtq qaqqqaqqtq acttcactca
                                                                      780
tggcccgctc cacacggcca ctgggggggc caggtcgaga agggtcgaag ttggccagct
                                                                      840
ccttctccat gtagtacagg acccgcatgg agtcgtcctg ctggctggcc tgaatcctgt
                                                                      900
agccactgcg gacacctgag ctactcctgt caacgtctcc agggtatcct ccagggtacc
                                                                      960
cgttgtaggc agggcccatg ggaatcatag ctggtggggg tggggtcttg gcgggagaca
                                                                     1020
ggtgggcata ggtgctgggg gcataaatgc tgggaacacc tgaggtggct gctttgccgg
                                                                     1080
cggcatacag ggcctcgggg cagcagcact tgtctgggca gcaggggcac ctgacgtagc
                                                                     1140
agcagcaagt gtgcgggcag cactggcacc agcagatgcc caggaggagg aagatgagga
                                                                     1200
aggcagccag gcataccaca accacgaaga gccagtcttc tatgggcccc gcctgaaaac
                                                                     1260
caggtaagag ctcagccacc cctgaggtcc tcccaaggac gatgagctct gcgtaggcct
                                                                     1320
cattgttccc ctggaggtcc tgggctgaga ccacggagca gtaatacaca ccactgtccc
                                                                     1380
cccacgccgt ctggtcaaag gtcaggtcag catttccggt gatggtaatc ctccggccct
                                                                     1440
ggtagtaatc tcccagggtc acagcgttgc cctgcttggt ggccacgacc ctgacggtgc
                                                                     1500
gcacgctgtc ctggcactca acgtaggggt tgtagcctgg gttcccggct gccagctggg
                                                                     1560
cattgagctg gttgtcgacg ctggccgggg agaaggcatc ggcgatgcgg tcccggcaga
                                                                     1620
aagacttgta cttccagatg acgatgggtt gcgtgggggt cgaggtcatc tggtaggtac
                                                                     1680
agggcagggt cacaggctgg aagaggatca ccacgtggta ggggttggac acggtcacct
                                                                     1740
ggatggccag cgccatcgcg gccgtctggg cgcgtctggc ccgcgcgtcc cttccaaagt
                                                                     1800
accttagggg gcgcggcgcg caccaaggcc aggagggtg cacgctcctc cccttcccac
                                                                     1860
ttccgttcct tgtccctact ccaagtccgt cctgttgcat
                                                                     1900
```

```
<210> 3580
<211> 1610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (344)...(1302)
<223> similar to gi2854163 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3580
ccactatcca tgtggtggaa ttcttctggc gccaggggcc gaccccacgt ctacctgcag
                                                                    60
cgcatccagc tcaacaaccc cacggagcgc gtggccgcgc tgcagactgt ggggcccact
                                                                  120
gccggcccag cccccaaggc cttcaccagt accctggaga aggtcggaga ccatcagttc
                                                                  180
ctcctctact caggccggtc cccgcctacg cccactgggt tggtgcacct ggtggtggtg
                                                                  240
gccgccaaga agctggtgaa ccgcctccaa gtggctccca agacgcagct ggatgagacg
                                                                  300
360
gccaaggagc tcaaggcgct gcaggacttg gcacggaagg aaatgctgga gctcttggac
                                                                  420
atgccagcgg cggagctgct tcaagaccac cagctcctct gggctcagct cttcagccca
                                                                  480
ggagtggaaa tgaagaagat cactgacacc cacacgccgt ctggcctcac cgtgaacctg
                                                                  540
acgetetatt acatgetete etgetegeea geceeactge teageceete cetgageeae
                                                                  600
agggagcgag accagatgga gtcgacgctc aactatgaag atcactgctt cagcgggcac
                                                                  660
gccaccatgc acgccgagaa cctgtggccg gggcggctgt cctccgtcca qcaqatcctq
                                                                  720
cagctctctg acctgtggag gctgaccctc cagaagcgtg gctgcaaggg gctggtgaag
                                                                  780
gtgggtgccc caggcatcct gcaggggatg gtgctcagct ttggggggct gcagttcaca
                                                                  840
900
ggcatccgct acaagaacga ccatatcaac ctggccgtgc tggcggatgc cgagggcaag
                                                                  960
ccctacctac acgtgtccgt ggagtcccgt ggccagcctg tcaagatcta tgcctgcaag
                                                                 1020
gcaggctgcc tggacgagcc agtggagctg acctcggcgc ccacgggcca caccttctcg
                                                                 1080
gtcatggtga cacagcccat cacgccactg ctctacatct ccaccgacct cacacctg
                                                                 1140
caggacetge ggcacacget gcacetcaag gccateetgg cecatgatga gcacatggee
                                                                 1200
cagcaggacc ccgggctgcc cttcctcttc tggttcagcg tggcctccct aatcaccctc
                                                                 1260
ttccacctct tcctcttcaa gctcatctac aacgagtact gtgggcctgg agccaagccc
                                                                 1320
ctcttcagga gtaaggaaga tcccagtgtc tgagtgaact aacagtcctg ctttcagcca
                                                                 1380
ccatttgcac aagacaccca gcactgaaag tcccgctgcc aggagcaagg gatcctttgg
                                                                 1440
aagcacccgc cctttgtgcc ttgttggggg aaaccggtga cgcagaagtg agtgtggata
                                                                 1500
caccagagtt tgcattggaa ggaatgagtg tcacgtgggg agggaagggg ccagtggacc
                                                                 1560
ttttgtaagc tttccactca ataaaatgaa cctgtatggc aaaaaaaaa
                                                                 1610
    <210> 3581
    <211> 767
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (49)...(617)
    <223> similar to gi5802258 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3581
acagacacgc caagettggc acgagggggt ggtgggggtg tgcaaaaagg gccccctgcc
                                                                   60
teteceacae tggeteatga ggetgeacee etgecegeeg ggegggeeeg ecceaceaee
                                                                  120
aacctcttca ccaagctgac ctccaaactg acccgaaggg ttaccctcga tccctctaaa
                                                                  180
eggeagaact ctaacegetg tgttteggge geetetetge eecaqqqate caaqateaqq
                                                                  240
tcgcagacga acctgagaga atcgggggac ctgaggtcac aagttgccat ctaccttggg
                                                                  300
atcaaacgga aaccgccccc cggctgctcc gattcccctg gagtgtgaag ctgaccagct
                                                                  360
cgcgccctcc tgaggccctg atggcagctc tgcgccaggc cacagcagcc gcccgctgcc
                                                                  420
gctgccgcca gccacagccg ttcctgctgg cctgcctgca cgggggtgcg ggcgggcccg
```

480

```
agcccctgtc ccacttcgaa gtggaggtct gccagctgcc ccggccaggc ttgcggggag 540 ttctcttccg ccgtgtggcg ggcaccgccc tggccttccg caccctcgtc acccgcatct 600 ccaacgacct cgagctctga gccaccacgg tcccagggcc cttactcttc ctctcccttg tcgccttcac ttctacagga ggggaagggg ccagggaggg gattctccct ttatcatcac 720 ctcagtttcc ctgaattata tttgggggca aagattgaaa aaaaaaa 767
```

```
<210> 3582
<211> 2350
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2352)...(515)
<223> similar to gi5817018 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3582 ttttttttt ttcaaatgca gcatatttta atttgtttca aataaagcaa tatatgtata 60 tatatttttt cagaaaaaca ccagatgtta aattctacaa aagcgcatgt gtcctcagca 120 gatcatgttt gtctgattat taagaattct tttttgtaac attaactctc taaagacaat 180 caatggactg acatcactgc tacaacacag gttgctaact gagcctctga tcttcagcca 240 catcttgatt ttcctaataa tgagtaaata ctgcctggct aaaatgctgc aaagtcttga 300 tqagagaaag catcaacaga tcaagcaaag ccatgaaaat tatgaagcaa gctagagctg 360 attattagaa ttagtaaaaa tgattaagag aggatgacac aaccatacgg gatttgtata 420 ttctgattga cactcttttg gcagcgaatt gggtcagcac ctcgggcagg gaaccaaaac 480 tgagtgaaaa ctgctctttt tcctcctagc tcaggccacc aacgtcacag ccgggactga 540 gagaactgct gcatctgtgg aaacttctat tctcgtgggg cagagattqc actgtgaaac 600 cctaccgaca ctaccccgga agggcctggc ctccgaggtg tctgcagcgt gctgccttcg 660 ccggggcttt tcagaatggg ccggggcctc gggggtcttc atccccaagg aagcctcttg 720 atttttggca ccgcctttgt ttttgggccg gaagccgttg tgcggctgtc ttctgtgttc 780 gtggcggctg ttgccctttc ccagtggctc ggcttcattc ccactgccct gcgacttggc 840 aggcccattt agcctgttgt tatgatactg tggattaaat ctccgtcttt ggttagaaga 900 tccattctgc ttgttggccg gcatggtctg gtgagagggg tcggcggtgc tggggagact 960 gctcaccatt ttggggtttg ccgctttgcc ttcagagggc ttattgtgag tggatgattt 1020 tcgggaaaag ttactctgtt tcccagaggt tgctgcgtgc gcattcagca gaggcagcag 1080 ggagctgcag ggagttcttg aggaatagtt gttctttgga tgtgtaattt ctccqcaqaq 1140 catgatttgg gccttcagct gttcgatgtc acaggaaaac cgggcagctt tcccgagctc 1200 ctcgtcatat ttacgctcgc tgacaaagtg cttaatttct gccctgagtt cggccagctg 1260 catctctgcc atctgactgg caaggtcagt gagtctcttt agttcttctg ctttcttctg 1320 acgagcagtc aggatttcca tggcttcttc tttaacttta tccatttctq ccattaatqa 1380 aacttctttg tcaatgatgc agttgtgtaa ttcagcaaag gcagctttga tcttcttcac 1440 ggaactatcc acttcttcct taatcatgac gcgatatcta gttagagaaa cggtgcagcg 1500 ttgcaaatcc ttcactgatt tctcaatatt tgggcctctt ttctttgcca actcatctgg 1560 ctttatttca agatgagctg caggggtatt ggacttaaca ggagatgttt ttgccttagg 1620 cttgcttggg ttacaaggct gctcagctga ccactgtagg ccatctgacc tctctgttgt 1680 tccatgtata ggtttggggt tcccatctaa ggatagtttc tgttgcagta gtctgttgcc 1740 ttctgtgacc cccacgaagt gcctttgaag gttcctcaag tatcgagatc tttttctcac 1800 gagggataag ggctggtttt tccgttagca gaatctgtgg acgagctgtc cttctcgcag 1860 ccattcatgg ggccgttttg aatctgtggt ggctgcggct gcaggqqccc tqcctcaqqc 1920

```
ctctccacct tgtctttagc atgctttgtt gccttgatgc tgcttggact tqcttctttt
                                                                     1980
tottttattg ttottctttt ttoctgtcat attocattct tttagaactt gaattgcact
                                                                     2040
gccatccaca aaggcttgca cggctttatc cacattaaaa tcaaactgtt ggagcaccag
                                                                     2100
gactatttca ttattgcttt tgttgggaac aactgatcta actgcataga tcttttcctt
                                                                     2160
gacattcaca tgagtattga gttcagccat cttgcttcta gtggaatagg ccctgggaat
                                                                     2220
ccacagcaat gttcctgaaa gcagcctggt ttctgaagag ctctgaaaaa tcaggcgcgg
                                                                     2280
aaaaagtgct ggagctcggg tcagcccttg gaaacccgac caacccgggg tgttccgccg
                                                                     2340
cctcctctac
                                                                     2350
```

```
<210> 3583
<211> 3775
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(851)
<223> similar to gi63752 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3583 atgagetgeg geogecece tecegacgtg gaeggeatga teacceteaa ggtggaacaa 60 cctgacctac cgcacctctc ccgacagctt gaggcgcgtg ttcgagaagt acgggcgcgt 120 gggcgacgtg tacatcccgc gggagcccca caccaaggcg ccccggggct tcgctttcgt 180 ccgctttcac gaccggcgcg acgcccaaga cgccgaggcc gccatggacg gggcggagct 240 ggacggacgc gagctgcggg tgcaggtggc gcgctatggc cgccgggacc tgccccqcaq 300 ccgccaggga cgacgccacg cggcaggtcc agaggcggcg gctacggacg gcggagccgc 360 agctacgggc ggcggagccg cagccccagg cggcgacacc gcaqccgatc ccqqqqtccc 420 agctgctcca ggtcccgcag ccgatctcgc tataggggtt ctcgctatag ccggtctccc 480 tacageegat eteettacag eeggtegege tacageeget eteectacag eagatetege 540 tacagggaat ctcgctacgg cggatctcac tacagctcat ctggttacag taactctcgc 600 tacageegat ateacageag eeggteteae tegaagtetg ggteeteeae tagetetege 660 tctgcatcaa cctccaaatc gagctctgcg cgacgatcca agtcctcctc ggtctccagg 720 tctcgctcgc ggtccaggtc ttcatctatg accaggagtc ctccccgggt atccaagagg 780 aaatccaagt caaggtcgcg atccaagagg ccccccaagt ctcctgaaga ggaaggacag 840 atgtcctctt aagaaaatga tgcatcagga agcaacgtga tggaggactt gggggaaaag 900 gatcacatac tcagtctatg gaagcaacgt ccctggaaga agaggctgcc tattgaaaag 960 gttgtgtcac acttttctac ctttttgcca gtttgaagct ttgcatcagg tggcaaaatt 1020 cattctatgt gccgttttgt tgttattcac attttattgt aacttaggag gtgaacgacc 1080 taagattacg ttattgggtt tggatatttg aggcaaaaat ttattttat ttctatagtg 1140 atgactgttt tggtttgaaa tgaacagatt ggtaacctaa tttgtggcct cctgactttt 1200 aaggaaacgt gtgcagccat tacacacagc ctaacgctgt caagacattg cttcaacatt 1260 1320 cctccaggtc taaaaggtag tgtgacccaa atttgtataa agatttttca tgtgaaagga 1380 ctggggtttt agcaaacaca ggtctaatct cttttgtgtt tttgtgcacc aggcccggct 1440 gcgtagcagt tgagtgatgc tggttagcta ttaaqqtqqc ctgttqcaqt qcaqaqtqct 1500 gagctgcttc ctgttttctt ctgattgctc ctggggaaaa cacgccttgt cctgaagaac 1560 aaatggctgt ccagtttatt aaaatgcctg tcaactgcac ttccagtcac ccaggccttg 1620 cagataaata atggagcatg cagtgagcac atctagctga cgataatcac accttttccc 1680 ccgtcttttc tgaaaaattg taaatctgat catatcaaca tgtatgaact taaaatatgg 1740

```
agaatgttat ggaagaaata gtttataagt ttgttaagta cttataacat ggtttatctt
                                                                     1800
tttgattatt aattttttac gctaaccatt gtttctgtag ttaaaattgt tttcttggtg
                                                                     1860
ttatcttttc tcagaataaa attagaaact tttgatggaa agtaggttgt tttatttct
                                                                     1920
gtatgacttt tggatatttg tacttttgag aaaattatta gcaccaagtg tttctcaaaa
                                                                     1980
tataattttt aaaaaatcct taataggctt ttagctatgt gctttattgt tttatcacaa
                                                                     2040
tgcagtttat ttgtagtttc tctctttttt cctcacacct atggtttttt tacttccaaa
                                                                     2100
attattttca aataatccat ttttggcttt catcattatc cctactagat gttatgtgtt
                                                                     2160
cttttgcaat tgtttctgct tataccttta ctagcaaagg gaaaaataac aatttggtgt
                                                                     2220
caatgatctg gtgacaatag gattacattg gagccaattg aataaattta ttctttcaat
                                                                     2280
catatggatc ttcattaata tttttgactg aattatcaat taaaaatatt tcattccctt
                                                                     2340
tgtgcagaaa ctgctaaatc cagggttcga ttcttgaatg aactggcaag gtggctgtgg
                                                                     2400
tctgtagata tacatcccac attttgttgt tataacagtt agtagttagt attgctttca
                                                                     2460
tatatagact ccagaatcta aattttacga taatgacatt tcttctggtc atgacaaatg
                                                                     2520
taatatttta caaatataaa tctacgtaga atccaaagac acacacagag cagtcctgtc
                                                                     2580
tgagaaataa aaaatcagga cacccatggc atcgtagtag cccctcgcgt ccagcaggtg
                                                                     2640
gcgaagggag gtgaggtata tttattaaat gggaccgagt gggacgggga cggggcagcc
                                                                     2700
ctaagggtag ggaagcattg tcaatttctg gggatagaat gagacccagg catagctgga
                                                                     2760
gtttgaagct ttgaagcaaa aatatctgta gaacatctta aacgtgacca aaatatgatg
                                                                     2820
ttaaaatcag caactcttta tacgttaaaa actttgaaac ctgtggccgg gcatggtggc
                                                                     2880
tcacgcctgt aatcccagca ctttgggagg ccaaggcagg tggatcacct gaggtcagga
                                                                     2940
gtttgagacc agcctgacca acatggagaa accccatctc tactaaaaat acaaaattag
                                                                     3000
ctgggcatgg tggcacatgc ctgtaatccc agctacttgg gaggctgagg caggagaatc
                                                                     3060
acttgaaccc gggaggcgga ggttgcagtg agccgagatc acgccattgc actccaqcct
                                                                     3120
gggcaacaag agtgaaactc catctctcaa aaaaaaaagt tcatcccaac tttcaagtct
                                                                     3180
acaaaaacat aatccaaatc taataacata gttgtaaatg agagcaacaa taaaaagtag
                                                                     3240
acatgggctg ggtgcagtgg ctcactcctg tagtcccagg actttgggag gccgaggtgg
                                                                     3300
gaagatccct tgagcccagg agttcgagac aagcctgggt aacacgggga gacccgtctt
                                                                     3360
tagtaaataa aaataaattt attaataaaa ctaaaaaattt aataataaaa agtggacatt
                                                                     3420
gttttttaaa atgtgtatag tatgcatttt aaagatagtg tccctgctgt ggaaaacctg
                                                                     3480
aacagacagt atgatccaga atgtcaggtg tggagttggg cggacaagag tctgctgatg
                                                                     3540
aggacaacct aaaagagcac tggatttgga atcagaagac ctacctttga ttcctggctt
                                                                     3600
tcccttaatg gccatgtgat gttattaagt cacctctaaa gctttagttt cctgtcagtc
                                                                     3660
aaatgttgac atgataccta cctcacaggg ttgttgtgag ggttaagtga aaggatcttt
                                                                     3720
gtgaaagtac tttttgaaat cattcagttg tcaataaagt tggataaaaa aaaaa
                                                                     3775
```

```
<210> 3584
<211> 4460
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(3450)
<223> similar to gi5733391 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3584
attgacccgc ctgcaggatt cggcacgagg ccgcttgaag atgccattga agatgaggaa 60
gaagaatgtc catcagagga aacagacatc atctccaaag gagactttcc attggaggaa 120
agcttttcca cagaatttgg gcctgaaaat ctgagctgcg aagaagtgga atacttttgt 180
```

aacaaaggtg atgatgaagg aatccaggag acagcagaat cagatgggga cacacagtca 240 gagaaaccgg ggcaacctgg agttgagaca gacgactggg atggaccagg agagctggag 300 gtgtttcaga aagatgggga acgaaaatt cagagtcgac agcaacttcc agtgggaaca 360 acctgggggc cgtttcctgg gaagatggac ttgaataata attctttgaa qacaaaqqct 420 caggtcccaa tggtgctgac tgctggtccc aagtggttgc tggatqtqac ttgqcaaqqa 480 gtggaagaca acaaaaacaa ctgcattgtg tacagcaaag ggggtcagct ttggtgtaca 540 actacgaagg ccatctctga gggtgaagag ctaattgccc ttgtggtgga ttttgactca 600 aggctacaag ctgccagtca gatgactctc acagaaggga tgtaccctgc acgcctgctg 660 gactcaattc agctgcttca ctcagcaaga ctgccatggc ttctattttg cccacagcta 720 ttgtcaataa ggatatattc ccttgcaagt cctgtggcat ctggtatcgg agtgagcgga 780 atctgcaggc ccatttgatg tactactgac agtgggaagc aaagagaagc tgctccggat 840 atacagagga aaatgaagac agtgcccatc agatttccag cctgtgccac ttaccacagt 900 gcaccaagag cttttcaaat gctcgagctc tagatatgca cctgaattca cacagtggag 960 tgaaaatgga agaattcctg cccctggtg ctagtctaaa atgcaccgtc tgtagctaca 1020 ctgctgattc cgtgatcaac tttcaccaac acctgttctc ccatctcact caagctgcct 1080 tccgatgtaa tcactgccat ttcggcttcc agactcagag ggagttattg cagcaccagg 1140 agctccatgt ccctagcggc aaacttccca gagaaagtga catggaacac tctccaagtg 1200 caactgaaga cagcttacag ccagccacag acttattgac cagaagcgaa cttccccaga 1260 gccaaaaggc catgcagact aaagatgcga gctctgacac agagctggac aagtgtgaga 1320 aaaagactca gctctttctc acgaaccaga gaccagagat acagcctaca acaaataaac 1380 aaagcttttc ttacacaaaa ataaagtctg agccctctag cccaagactt gcctcatctc 1440 cagttcagcc taatattggg ccttctttcc ctgtgggccc tttcctatct cagttttctt 1500 tcccccaaga tatcaccatg gtccctcaag cttcagagat cttagctaag atgtctgaac 1560 tggtgcatcg gcgactgagg catggcagta gtagctaccc tcccqtcatt tacaqccctt 1620 tgatgcccaa gggggctact tggttttgag tgtaacataa cattcaataa tttggataat 1680 tatctagtgc acaaaaagca ttattgcagc agccgatggc agcagatggc taagtcccca 1740 gagttcccta gtgtgtcaga aaagatgcct gaagctttga gtcccaacac tggccaaacc 1800 tccataaacc ttctcaaccc agctgctcat tctgctgatc ctgagaatcc acttcttcaa 1860 acatcttgca tcaattcttc cactgtctta gatttaattg ggccaaatgg gaagggccat 1920 gacaaggact tttccactca aactaagaag ctctccacct ccagtaacaa tgatgacaaa 1980 attaatggaa aacctgttga tgtgaaaaat cccagtgtcc ccttagtgga tggggaaagt 2040 gacccaaata agactacctg tgaagcttgc aacattacct tcagccggca cgaaacatac 2100 atggtccaca aacagtatta ctgtgctaca cgccacgacc ctccactgaa gaggtctgct 2160 tccaacaaag tgcctgccat gcagagaacc atgcgcacac gcaagcgcag aaagatgtat 2220 gagatgtgcc tacctgagca ggaacaaagg cctccactgg ttcagcagag atttcttgac 2280 gtagccaacc tcaataatcc ttgtacctcc actcaagaac ccacagaagg gctaggagag 2340 tgctaccacc caagatgtga tatctttcca ggaattgtct ctaaacactt ggaaacttct 2400 ctgacgatca acaagtgtgt tccagtttcc aaatgtgata ctactcattc cagtgtttcc 2460 tgcctagaga tggacgtgcc catagatete agcaaaaagt gtttatetea gtetgagegg 2520 acgaccacgt ctcccaaaag gctgctggac tatcacgagt gcactgtgtg caagatcagt 2580 ttcaataagg tagaaaacta tctggcccac aagcagaatt tctgcccggt tactgcacat 2640 cagcgtaatg acctgggtca actggacggc aaagtgtttc cgaatccaga aagcgaacga 2700 aacagccctg atgtcagcta cgaaagaagc ataataaaat gtgagaaaaa tgggaatttg 2760 aagcagcctt cccccaatgg aaacttattt tcatcccacc tagcaaccct gcaaggcttg 2820 aaggtettta gtgaagetge teageteatt getacaaaag aagaaaacag acatttgttt 2880 cttccacaat gcctttaccc tggagcaata aagaaagcaa aaggagccga ccagctttct 2940 ccatattatg gaatcaagcc aagtgattat atttctggtt ctcttgtcat ccataacact 3000 3060 gacatcgagc aaagcagaaa tgcagaaaat gaatctccta aaggccaggc ttcctcaaat gggtgtgctg cgctgaagaa agattctctg ccattgttgc ccaaaaatcg aggaatggta 3120 atagtgaatg gtggactgaa acaagatgag agacctgctg ccaacccaca gcaagagaac 3180 atttcccaga atcctcagca cgaagacgac cacaaatctc cctcgtggat ctctgagaac 3240 ccattagctg ccaatgagaa tgtctcacca ggaattccct cagcagagga acagttgtct 3300 agtatagcaa aaggtgtgaa tggttccagc caggctccaa ccagtgggaa atattgccgg 3360 ctatgtgata tccagttcaa caacctttca aactttataa ctcacaagaa gttttattgc 3420 tcatcacatg cagcagaaca tgtcaaatga actaactaaa catcagtcac ctttggtatc 3480 agtgtttagt atgttgttct aaccagtcca gaaaaaaaaa taagctgttt gaattacatc 3540 tgggcaatca ggagataatt cattatggct gagttgaaga cttaaggtgt aatttcatta 3600

```
cagtccatta gtaaagtgta ttattggtgc cattttcaaa aaaattaatt tattttacca
                                                                     3660
gcagtattca tagctgtggt tatgttattt tttatttaaa aactttatat taaagtcatt
                                                                     3720
tgtaatgtta ttgtatagtt attgtgtagc acatatggtt tgcactgtat agtagctttt
                                                                     3780
aaagaaaata gtcacaatac agaaaagcat tttagaaata gcttcaaaag cacttgtgta
                                                                     3840
tcttgatttt ttcttatatg ctgttgcaga tatatgtata tgctaaaata taacttgcaa
                                                                     3900
agatgttcta aatacacatg ctataagttc qccttaagat ttcaattctt ggataatcag
                                                                     3960
qctctgtttq cactttatat tttaqcaqat acaqtctctt agtcactagg ctttgcattt
                                                                     4020
gtatgtaget gtatgtttee gteeatttte ttaateetga acetgtatgt taaatgaaga
                                                                     4080
tggcaatttt tttcttgtat agtacttgta ttttctttcg ctgatgcagc tctgtctcaa
                                                                     4140
tttttaaacc tttgctgtta aatgcaatac tttataaaga atgaacaaaa ttactggaag
                                                                     4200
cagtattgta agtaatgagg tagtattaat cagttttatc ttttgaaagg cacagtctaa
                                                                     4260
atcgaaaccc taaactcaat gctgcaagta tgaatttaat tcatatataa gatctattta
                                                                     4320
aatataagag tagcaatact gcacctggtg atcacaaaga taatgttcta cttctgatag
                                                                     4380
aaataatttc tcaacaaatg ttgttactat gcactgtata tggatggaat aaaattccag
                                                                     4440
attgttggag aaaaaaaaa
                                                                     4460
```

```
<210> 3585
     <211> 1157
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (17)...(821)
     <223> similar to gi4138016 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3585
ccacgcttgg cacgaggtgg tcggctaccc ggacttcctg ctgaaacccg atgctgtgga
                                                                       60
caaggagtat gagtttgagg tccatgagaa gacctacttc aagaacatct tgaacagcat
                                                                      120
ccgcttcagc atccagctct cagttaagaa gattcggcag gaggtggaca agtccacgtg
                                                                      180
getgeteece ccacaggege teaatgeeta etatetacee aacaagaace agatggtgtt
                                                                      240
ccccgcgggc atcctgcagc ccaccctgta cgaccctgac ttcccacagt ctctcaacta
                                                                      300
cgggggcatc ggcaccatca ttggacatga gctgacccac ggctacgacg actgggggg
                                                                      360
ccagtatgac cgctcaggga acctgctgca ctggtggacg gaggcctcct acagccgcct
                                                                      420
cctgcgaaag gctgagtgca tcgtccgtct ctatgacaac ttcactgtct acaaccagcg
                                                                      480
ggtgaacggg aaacacacgc ttggggagaa catcgcagat atgggcggcc tcaagctggc
                                                                      540
ctaccacgcc tatcagaagt gggtgcggga gcacggccca gagcacccac ttccccggct
                                                                      600
caaagtacac acatgaccag ctcttcttca ttgcctttgc ccagaactgg tgcatcaagc
                                                                      660
ggcggtcgca gtccatctac ctgcaggtgc tgactgacaa gcatgcccct gagcactaca
                                                                      720
gggtgctggg cagtgtgtcc cagtttgagg agtttggccg ggctttccac tgtcccaagg
                                                                      780
actcacccat gaaccctgcc cacaagtgtt ccgtgtggtg agcctggctg cccgcctgca
                                                                      840
cgccccact gccccgcac gaatcacctc ctgctggcta ccggggcagg catgcacccg
                                                                      900
gtgccagece egetetggge accaectgee ttecagecee tecaggacee ggteeceetg
                                                                      960
ctgcccctca cttcaggagg ggcctggagc agggtgaggc tggactttgg ggggctgtga
                                                                     1020
gggaaatata ctggggtccc cagattctgc tctaaggggg ccagaccctc tgccaggctg
                                                                     1080
gattgtacgg gcccccctt ccctgtgttc ttgctgcaaa gtttggtcaa taaatccctg
                                                                     1140
ccctgttaaa aaaaaaa
                                                                     1157
```

```
<210> 3586
<211> 2708
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2707)...(1603)
<223> similar to gi2623162 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3586
aaaaccatgt tggcatcaat gagatatgat gtgccattct aaaagctttc tctcctgatt
                                                                       60
gctttagaaa ttaggatctg gaaggacttt aacatgaatt agttttttcg catgtttata
                                                                      120
ggccagagac ctgcccaggc aatgaactga tagatttaaa taaatattcc cctcctaact
                                                                      180
ttttccttta gctacagacc agacagtcca aacacaaagc tcagaattcc agctccaact
                                                                      240
tatttactca gtgaatttat tgtaaaaata aagaaactca attattccag ttaatggatt
                                                                      300
tcacgttaaa tagtttaact ttcaatgggc tttctgaaga gctgttcata ggatgatatt
                                                                      360
tggaagagtc ctttccttaa ggaaaaaaag ggtcgaacaa taaataaagc agttacttgc
                                                                      420
gttaacggtc acgttatttc attaaaagag aggaggagca gaaatctatg acatagttgc
                                                                      480
ccaacatggc atttatctgc tgcaacagaa agctgtaaca ctggcgggca tttcacagta
                                                                      540
tttgcgcata gtaaacttct gccattgtta aagtctgagt tagaattatc aatqaattct
                                                                      600
tttttttttt tctttaaa ttttcttgat tttaaaaaat gtatttgtgt tttgcaggtt
                                                                      660
ggaacgcaaa cccagtctgg ccacgtcccg tgaagttgtg gacaaaatgt ttcagtttct
                                                                      720
gttcacctct gtgcgtgtgt gtgtatgtgt tgtgtgcatg tgtgtgtgtg tgtggggtg
                                                                      780
ggggatgggg taggtatgtg cttttggctc atgtttgtga tgataactga agtcttttgt
                                                                      840
gggtccgacc tgttgtaggg tgtgggggaa agtgaaggaa gagaatgaag gtgagtcccc
                                                                      900
gccgttgcaa accttcacca aaccacgcgg cccagttttc gtgagtaccc ctgtgtccca
                                                                      960
gagaggagga cccagcgtcc tcggctctgc cgcaggcctt cttggtctgg tgggtactcg
                                                                     1020
aggcagttga gaacettget gagetgageg ggcaeetege ettgeetget ggttegaeae
                                                                     1080
ctgaccccct ccccctggga ttatgtacac gcatcattgg gcttcatgga tgtggaaagg
                                                                     1140
ggagcaaagg atggtttggg gggtacgtcc ggctttagcg agggcgtacg cttcagcccc
                                                                     1200
gaccttgtca gtgagttgta ggcgttgagg ctgggctgcc tcgagacagt cacggcctgg
                                                                     1260
ccagatggct gggagctgtg cacctggatg gagtccaccc tctgcggggc gggcggcqqq
                                                                     1320
ttgtctcccc tgccaaagct ctggtttctg gagaggtgag aggaattgga ggagttagtg
                                                                     1380
ttgtttcttt tgagagtggt ggcctggtgg cttctcgtga gcgagttcgt ggggtagctc
                                                                     1440
ctcttatagt caaccccgta ggaagaggag tggtgcattt ccagccgctt gcttagaccg
                                                                     1500
gtctgagaca gggaggctcc cgggggaccc agggaggcct cccgctgtgg aactttgggg
                                                                     1560
ggcaggctgt ccaggttctc cacaaggttc accccatggt tgggactctt gctgctgaga
                                                                     1620
tgttccttga tggtcttata ctccagtgtg gcggcctggt cctccagcgc catctgggcc
                                                                     1680
acctcgctca ttttgggctg gtccacgtac tcatgctggt agccctgctg cgtgatgggc
                                                                     1740
aggaccacca cgctggggat gtggctgggg gaggcccgca ggggcaggtc ccgtgggaat
                                                                     1800
cacaggggga gcccatgggg ggcatgtcct ttgtgcaggc attgatgagg ttctggttcc
                                                                     1860
tctcccactc gcggctgccg cggctgggct tccgcttctg ctgcagcgtt ggggttgact
                                                                     1920
ctggggtggg gagggccgtc aggtccaggt ggtgctggtc tgctttaatg agcatcttgg
                                                                     1980
ccgtgttgcc gggagtggcg agcttgccgt tgtgcatgag tggcgtgagg atggcctccg
                                                                     2040
gctttgggtc tttggattga gtgtccccaa agaggccgct gagcttggtg acgctgctca
                                                                     2100
tggagccccg gcgcgagtgg gtgagctcct tctccttgcg ctgcaccaca gccacgtctt
                                                                     2160
tgcgccgatg atcacagacg cagtagacgg tgatgcccga gaagacggcc cccatgacga
                                                                     2220
aagccaggat gactgcaatg gccaagaggg tgacgggaac cagctggtcg tggcctttga
                                                                     2280
ggtaactttc ccgaatcact ccattcttgt cttggtgatt atgggaagac actgcccca
                                                                     2340
```

```
aagggtctgt gctgtcaggt gagtcaagca gatgcttcca gtccagcatt cctccctag 2400 actcataccc ctcttgagcc gtcgaatctg atgtggttgt gctgggcaag agggaactgg 2460 aatgcccatt cagtgccaca aaggaattgt gacagtcccc cagaccatct gtattgccac 2520 gctctatgtc ctgctcaaaa gtcagtctgc tgttgggtga taaatggctg caggcaccac 2580 cttcctttat ccatccacaa tatgggtctc tggaggcaat acaggttttt ttacacttcc 2640 catgtcgttc acaccggcca aggggaacct ttatcacaca ggtagagaac gcctcgtgcc 2700 gagattct
```

```
<210> 3587
<211> 1754
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1756)...(1183)
<223> similar to gi1657835 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3587 ctgttcctat cacatctcac tcccagtagg tgttgcattt ttggatgaat ctaatagttt 60 tcctttattt tcacttttca cgaggtgaga ttagatgtct gtgtgaaatg aatgttttac 120 tatggtccta cacataatgt taaaattaca aagtaaaata atgaggtaca agatatttat 180 tgacaccaaa atacatacaa gtatttccga acaagatgaa aatatctcct ggtttctcac 240 acagagaccc atactactcg gaaggcagga tatgccagtt ttcctttgtg gaaaagtgta 300 tccaggcagc aaacttaatg aggagtgggc agttttgtcc ttaaaaaaact qcaqqqaaqq 360 gttctttcca gggagtggta gtttggtgct ccagggtgct ggcagggaca ggacagctga 420 ttgatagaag tgagggctct aacaaagttc actatttaca tcaaaatgac ttgatqcqqq 480 ctctggggcc tctgggcctt tgtttaaaag atgatgctgg aaccatgtct ttgaaacccc 540 accagcatta gggcttaggt actaagcaag tccgggactg tatcccgggc ttcagtgact 600 gacccaatca caacacgtgc ccagttgaat agtgactgta acagatcacc cacttttaaa 660 ggctccccag aagaaatgag cacacaaaat ctagctgcag aaaagccctt tcccacatcc 720 tectetgeet atgtgggeae tgaggeaact geeetgactg tgaaagttea eeeettgtga 780 ataccactet ttaaatecaa attgetteat tgagatetta aaaggaatet tgaaatecag 840 atgattgggt agaaaatgtg acatggaatt ttactctagc gtcaaaacaa cttttaaaat 900 agtcctgctt attcaagtta gtttctcctc cagaaatctg aaattagatt tgataagtta 960 aagattatac aaacagggtg gctttcaata atttaattag actcatgcca aaaaaatgag 1020 cttccaggaa atattaaata ttattcttaa agcaatttgg acacagacaa tcacacatac 1080 1140 aatgacaaca caattagagg taaacaatat tttctttggc tccatctcca gtttccccat 1200 cttgtctggt cattgtcctt gtcggtagat ttagctttgc ttctgttata aacqcctqca 1260 gttgagggcg gtgtgaattt gagtcatggg gggttgggga ctcagtgtgg gaggtgtcca 1320 aatcattttt acaagaatcc ttgctgcttt catggaaagg aagtatctga tggccggaac 1380 cagcggctgt ccacagtttg tgactgacat tcgaaggctg agaagggtcc accttgaggt 1440 ctacttgatg ttcactagtc ctcaccaagt cagaatgaga ttgagttgta gggtaagtgg 1500 catcctgatg gataactgat ggattcagtt tgttgaaagt gttaaatgac atttgtacta 1560 aagcttcatt gatgaagaat gagttttcat gacataaact ctcaqatcga ttaagttcca 1620 ttacctcggg gccacccgga aggagcaccg cgggcaggct cctctgccgg ccgtgcttcc 1680 agtqgcccag caggctctgc tgggcccgca tcctcgcctg ctccctctcc accaggcgca 1740 ggccctcgct cata 1754

```
<210> 3588
<211> 2018
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (53)...(453)
<223> similar to gi5441607 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3588 attgcccgcc tgagaattcg gacgcgctcc ggctcgtagc ccacaqccca ctgccqqcqq 60 ctgggcgctg ccgaggctcg gggcgcgcgc agttggcgtc tgccagtgcc aagactgtgc 120 cgccccaca gccgaggcgc gaaaggggga cgcccggcct ctgggccgct gccttcgctt 180 tetettegtt gttgegaacg eegteegete aggaggegee eegegaeegg egegatgagt 240 gccaacgagg accaggagat ggaactagaa gcattacgct ctatttatqa aqqaqatqaa 300 agtttccggg aattaagtcc agtttctttt caatatagga taggtgaaaa tggtgatccc 360 aaagcettet taatagagat tteetggaca gaaacatate eecaaacace teeaatteta 420 tctatgaacg cttttttaa caacaccata tcatcagctg taaagcagag tatattagcc 480 aagctacagg aagcagtaga agctaatctt ggaaccgcta tgacctatac attgtttgaa 540 tatgccaaag acaataaaga gcagttcatg gagaatcaca atcccatcaa ttccgcaaca 600 tcgataagca atatcatctc aattgaaact cctaatacag ccccatcaag taagaaaaaa 660 gacaaaaaag aacaactttc aaaagcccag aagcgtaagc tggcagacaa aacagatcac 720 aaaggagaac ttcctcgagg ctggaactgg gttgatgttg tgaaqcattt aagcaaaact 780 ggctctaagg atgatgagta gcacttggaa tttgagacaa ggaaagagca ttctttaaag 840 agtaaaactg ggttcaaaat ctttcattac tattttctgg tattgaggcg actttttata 900 aaacacaatt ttttgtatgt ttcttacatt aaaaaggttg taagttgaaa gttcatgaag 960 agatcttgtt gtattaaatt attttcacaa acttgcctta ataaaaggtg aaaatgttac 1020 tgtttagtat actttatgaa gccccttgag ctttataaat ggacaggcat ggggaataag 1080 aatcagtgtt aatttaaatg atcttatcct ggtggatgtg ctattttctt aaaggagtat 1140 gaagcccttt tcaaactatc atcccagtgg agcggagtac tcagtgaaca gttactccat 1200 agtgcaatcc atattaatag gcttcttctc ttaagtcttc atctcttctt ttgcttaatt 1260 actgaaccgt aaattacttc agagaaattt aaatgctggt atttgaactt tatacatgat 1320 actttttgta gtttctttta atttttgaaa gatgaactgc ttccttttaa taaattaata 1380 tctatttata cttttctctt gatttgggtc aagatgtttg atcatgagtg ctttgagtgg 1440 tatgtggaat aggagaatat aaaaacaaat ctgccaaata cactagaaag cattttagta 1500 agaaatgctg gccctttctt aaaacatttc tcttgcatat accaggatgg gagtaaaaga 1560 tgccttaata tttagttttt gtattgttgg agacattgat tttaataaaa tcctatttat 1620 ctgctgttgt gtgcttttag ttgttggata actgaggtct cctaaatggt tcaacataaa 1680 accacatttc aagtettgtt tetttttgga gtgtetttte aagtatteaa atgtatttet 1740 caacctgagc atcttttaa tcatatacat gggagtcttt taaatgctga actgttacac 1800 atgcttgatt taaaaataat aataatagag gaaactattg gtctagttgt gccaagaaaa 1860 gtttctgatg tttatgtgtg atgtacagtg attttgtata tgcgcccagc tttaagaaca 1920 cataaaacta ttacgtctgg taggaagatt gttagtgcct caagttacac ctgtgcagct 1980 tgggtctgag ttttgataga acagtaaaca tttaaagc 2018

```
<210> 3589
     <211> 1490
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1493)...(1133)
     <223> similar to gi4884100 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3589
ttttttttt ttaaggatga gaagagattt tagttattca gtgttttcat gagtttcaac
                                                                       60
atagggatat agatacaatc agcttcttac atagtttact atctggggag agaacatgaa
                                                                      120
agacactgtt taacagtgca aataattcca gggaataaat atacatgaat gtgtttttc
                                                                      180
aaaaatacca ggttctttat acaaatgtat aacctaaata ctgatcccca tagtgggggt
                                                                      240
gggttgtaac tgaaaggggc tttgaggaaa agggctttgg aataaaacta ggtcatccac
                                                                      300
cctagcccaa agatcccttt cccagccagg cacaaaaggg aatttgttaa gggaggaaca
                                                                      360
gaggtttaac tgttcaggta tctttcctaa ttctggtaaa tttttcccca agttttgaaa
                                                                      420
aatacccatg gaagaatcct taggaatgcc cagtaaccca gggaatgggg atatttggca
                                                                      480
tatccacaac atcctacagg ctataataca ctccgaatgc cttctcaatg tggggaagta
                                                                      540
tgagaagtta gataattctc ctagtgtctg gcttcctttt tctttgccgt tccctctcat
                                                                      600
acgttcaatc accetgtgtt acaggacaca cagtaagtag tgggaaggtg ttaagacttt
                                                                      660
gacagcaaag caaggtcaga ggtagagggg aatgtttaac caatcawtgt tcaaatataa
                                                                      720
gctactcaat gaagagtttt aggtttaaag agcgagrata ttcaccatta ctgagaaatc
                                                                      780
tsragtttct cattcaattt cgcattgcac tttgctacca caaactaaat gggtgtacat
                                                                      840
ttttgagtgc tgatttatta ctcaaaggtt tgaatttgga gactgaaaca aaccatgctt
                                                                      900
tatctgtgta ctttgagaaa atccatccac aagaaaggag ccaagcgtca gtttccaatg
                                                                      960
qqqqqaacat tctcatggag gtactgtaag gctaagtctg tccacttcat ttcttgttct
                                                                     1020
ttgacagatt ctgtggtgcc accattgtct tgttcaggtt caggaagctc attcagtggt
                                                                     1080
attgcgacat cctcataagg cagcttgtct tctcgccaag catcatcaat caaatccaag
                                                                     1140
atccttccac ctctctgaac ctcactgtcc attttcctgc agctttgatc ttgtcaaatc
                                                                     1200
gtacgacagg ccgtccctca gctgcggctt cctgcctyca ggcaggatgt accaaacgtg
                                                                     1260
gaagcggaga cggggaggtc tgggggtgcc acgcaagtcc ctttcctccc gacacgagtg
                                                                     1320
cagtaaagaa aaacggttat gagcgtaaag tgacagcctc ggccgatggg aatagggggr
                                                                     1380
aagtccgaca ctgagcaacg aacgcattcc cgcgcctcca aaacctaggc cgggggcgct
                                                                     1440
ggaaaccett accggcacce ggccaccgcg gcagacgett gctcctqcca
                                                                     1490
    <210> 3590
    <211> 2177
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (2)...(977)
    <223> similar to gi1916617 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3590
cggcttcgtg gaagcgggcg aggagtgtta ctgcgtttcc tggccaggag tgccgcgacc
                                                                       60
tetgetgett tgeteaeaac tgetegetge geeeggggge ceagtgegee caeggggaet
                                                                      120
gctgcgtgcg ctgcctgctg aagccggctg gagcgctgtg ccgccaggcc atgggtgact
                                                                      180
gtgacctccc tgagttttgc acgggcacct cctcccactg tcccccagac gtttacctac
                                                                      240
tggacggete accetgtgee aggggeagtg getactgetg ggatggegea tgteceaege
                                                                      300
tggagcagca gtgccagcag ctctgggggc ctggctccca cccagctccc gaggcctgtt
                                                                      360
tccaggtggt gaactctgcg ggagatgctc atggaaactg cggccaggac agcgagggcc
                                                                      420
acttcctgcc ctgtgcaggg agggatgccc tgtgtgggaa gctgcagtgc cagggtggaa
                                                                      480
agcccagcct gctcgcaccg cacatggtgc cagtggactc taccgttcac ctagatggcc
                                                                      540
aggaagtgac ttgtcgggga gccttggcac tccccagtgc ccagctggac ctgcttggcc
                                                                      600
tgggcctggt agagccaggc acccagtgtg gacctagaat ggtgtgccag agcaggcgct
                                                                      660
gcaggaagaa tgccttccag gagcttcagc gctgcctgac tgcctgccac aqccacqqqq
                                                                      720
tttgcaatag caaccataac tgccactgtg ctccaggctg ggctccaccc ttctgtgaca
                                                                      780
agccaggett tggtggcage atggacagtg geeetgtgea ggetgaaaac catgacacet
                                                                      840
tectgetgge catgetecte agegteetge tgeetetget eecaggggee ggeetggeet
                                                                      900
ggtgttgcta ccgactccca ggagcccatc tgcagcgatg cagctqqqqc tqcagaaqqq
                                                                      960
accetgegtg cagtggeece aaagatggee cacacaggga ceaececetg ggeggegtte
                                                                     1020
accccatgga gttgggcccc acagccactg gacagccctg gcccctggac cctgagaact
                                                                     1080
ctcatgagcc cagcagccac cctgagaagc ctctgccagc agtctcgcct gacccccaag
                                                                     1140
cagatcaagt ccagatgcca agatcctgcc tctggtgaga ggtagctcct aaaatqaaca
                                                                     1200
gatttaaaga caggtggcca ctgacagcca ctccaggaac ttgaactgca qqqqcaqaqc
                                                                     1260
cagtgaatca ccggacctcc agcacctgca ggcagcttgg aagtttcttc cccgagtgga
                                                                     1320
gettegacee acceaeteea ggaaceeaga gecacattag aagtteetga gggetggaga
                                                                     1380
acactgctgg gcacactctc cagetcaata aaccatcagt cccagaagca aaggtcacac
                                                                     1440
agcccctgac ctccctcacc agtggaggct gggtagtgct ggccatccca aaagggctct
                                                                     1500
gteetgggag tetggtgtgt eteetacatg caatttecae ggacecaget etgtggaggg
                                                                     1560
catgactgct ggccagaagc tagtggtcct ggggccctat ggttcgactg agtccacact
                                                                     1620
cccctggagc ctggctggcc tctgcaagca aacataattt tggggacctt ccttcctqtt
                                                                     1680
tetteceace etgtettete ecetaggtgg tteetgagee eccaececa ateceagtge
                                                                     1740
tacacctgag gttctggagc tcagaatctg acagcctctc ccccattctg tgtgtgtcgg
                                                                     1800
ggggacagag ggaaccattt aagaaaagat accaaagtag aagtcaaaag aaagacatgt
                                                                     1860
tggctatagg cgtggtggct catgcctata atcccagcac tttgggaagc cggggtagga
                                                                     1920
ggatcaccag aggccaggag gtccacacca gcctgggcaa cacagcaaga caccgcatct
                                                                     1980
acagaaaaat tttaaaaatta gctgggcgtg gtggtgtgta cctgtaggcc tagctgctca
                                                                     2040
ggaggctgaa gcaggaggat cacttgagcc tgagttcaac actgcagtga gctatggtgg
                                                                     2100
caccactgca ctccagcctg ggtgacagag caagacccct gtctctaaaa taaattttaa
                                                                     2160
aaagacatat tacactt
                                                                     2177
```

```
<210> 3591
<211> 489
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (490)...(41)
<223> similar to gi4096055 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3591
ttttttttt ttacagattt tggcttttat tctggccatc acacatctac ttctaagaca
                                                                       60
acacagaccg gcagtacccc atcccccatg accactgtca caaccccaat ttcctcagcc
                                                                      120
ccctcctccc accccacccc ttctgccaag ctccccgtat gggggctctg cctacacctc
                                                                     180
accccgggca tgcagcatga agtgcccgtg cagctccccc aggttqtcqa aqqaatcctc
                                                                      240
acatteegta cagtggtagg tteeeteete eteetetee teeteeteet eeegeeeage
                                                                      300
tggtcggccc tccccagccc gaggtggttc ctcctcttcc tccccgaggg ccctqccttc
                                                                      360
aggggctggt gcttcctggg gggctgtagc agggcagcag aacctgcagg gtggggttcc
                                                                      420
cggtggggcc tccccaaggg gtgagcggcc acagagctgg caaggctggg ccgggggctq
                                                                      480
ggctgcacg
                                                                      489
```

```
<210> 3592
     <211> 933
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (875)...(252)
     <223> similar to gi212659 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3592
ttttttttt ttaacgggaa aggatgagtt acgtttattg ccccatccct tcactgaatg
                                                                       60
tttacattaa caaacaccaa agagcaaact gggcttccta cactgggcca tgcagaggac
                                                                      120
aggccaagaa actccacatc ataacagcct cctgatgcct gggcttggct ggagctcaca
                                                                      180
tgaggtgctt tgatttcttc tgcagactct cggtgatgga tgctacaact gacttatcat
                                                                      240
ctttgtcata gacggtgagc gtgcagctgc tgcqqctcct tqcccaqctc gttctccacc
                                                                      300
agcacgctgt aatcgccgct gtccttgagc gcgcaggtgg ggatgacgag ggtgcacacg
                                                                      360
ccgctggtgg agttgtacca gaacttggag ttggccgtga tgttgacgtc gcccttgtag
                                                                      420
agggtcactg tgggccgcgg gttcccaagg aaggcgcagg tcatggtgca gtcctggccg
                                                                      480
cggagcaccg tgtgtggctt gaggggcgtc acgaagcgcg gcgcgtggcg ccagtccttc
                                                                      540
ttctcgtagg gcttgagctt ggcgctcagg tcctggatct ggtccttatt gatgagccag
                                                                      600
gtgtccctgg agtcaagtgg ctcactgtca ccgatttcat tccgagccac cactctgaag
                                                                      660
tagtacttcc tgcctgggag cagccccgtc actgtgtact tgttgctgaa gacacqctcg
                                                                      720
gctgccgtgt accaggtggc tgtgcttgca tcccgcttca tgatgatgta gtgagcctca
                                                                      780
eegteeteet geacatetgg getgtggtte eaggteagag teactgtgtt ggggaettee
                                                                      840
tcaaacaacc gtaggtttgt ggggggccga gggaaatctg gaagagttgg aagatctgtc
                                                                      900
agcgaccttg gggcacctga agtattatgt ccc
                                                                      933
```

<210> 3593 <211> 1779

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (146)...(955)
<223> similar to gi2462828 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3593 tttcgtcttc actatggcga cggtgggggc tccgcggcac ttctgccgct gcgcctqctt 60 ctgcaccgat aacttgtacg tggcgcgcta tgggctgcac gtgcgcttcc gaggcgagca 120 gcagctgcgc cgggactacg gcccgatcct gcgcagccga ggctgtgtta gcgccaagga 180 cttccagcag ctgttagcag agcttgagca ggaggtggag cggcggcagc ggctggggca 240 ggagtcagca gctaggaaag ccctcatcgc gagttcctac cacccggcac ggcctgaggt 300 ctacgactca ctgcaggatg cagctctggc ccccgagttc ctggccgtga ctgagtacag 360 cgtgtcccca gacgcagacc tcaagggcct tctccagcgg ctggagacag tatcggagga 420 qaaqcqcatc taccqggtgc ctgttttcac agcgcccttc tgccaggccc tgctggaaga 480 gctggagcac ttcgagcaat cggacatgcc taaggggagg cccaacacca tgaacaacta 540 cggggtgctg ctgcacgagc tcgggctgga cgagccgctg atgacaccac tgcgggagcg 600 ettectgeag eegetgatgg eeetgetgta eeetgactgt gggeggggge eggetegaea 660 gccaccgggc ctttgtggtc aaatacgcac cgggccagga cctggagctg ggctgcccac 720 tatgataatg ccgagctcac cctcaatgtg gccttgggca aggtcttcac agggggcgcc 780 ctgtattttg ggggcctctt ccaggcaccc acagccctga cggagcccct ggaggtggag 840 cacgtggtgg gccagggtgt cctccaccgt ggcggccagc tgcatggagc ccgqcccttq 900 ggcactggtg agcgttggaa ccttgtcgtc tggctccgag cctctgctgt gcgcaacagc 960 ctctgtccca tgtgctgccg tgagcccgac ctggtggacg atgagggctt cggtgatggc 1020 ttcacccgag aggagcccgc cacggtggat gtatgtgcgc tcacctgagc ttgcttgggc 1080 ccagtgtggg ggtggcaggc aggtgagggc tccgttgcct tggtctgggg gcagaaataa 1140 aatccccgca gcctactgca cttcttggct caacggtgtg ccaqcttctq qqtcattcta 1200 tggggcaaag atgctgcctt agttcaggtt tgtcagaagc agggtctgga atggggcttc 1260 agcgagggag tcagggaagc aggggagggg agggagcagc tgggcaagga agtggcttca 1320 gaggacgtcc agcctcagct ggccccacgg agagctccag gcagagccca cagtaccaca 1380 gtgtgcccac accaccggtt actggctcct ggatgagggg gccagagagg agtgaataac 1440 ttcccagaca cttacctcca gggcagggtg ccttccagta gccaagggaa gcctccagag 1500 agcacagatg tgaaccetca gcagcaggca tcaccecca qtqqactcqq qtqqqccacc 1560 agtagcatct tctagatggc agaggggtga atggcagggc caggaaccag gctgcccggg 1620 ttcccattct gcttttgcca cttccagctg tgtqqcttta ggtqaqcctt caccttttgg 1680 tgccttcgtt tcctcattta gcccctacct cctagagctg ttttgggagt caaatgcgct 1740 gacgtatata aagtgctttg caagatcaaa aaaaaaaaa 1779

```
<210> 3594
<211> 819
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(820)
<223> similar to gi5410527 in the genepept database release 114,
```

```
<400> 3594
attttcacat tgccaggtac cagaaacaca gaagactgac acccgccact taagtggggc
                                                                       60
cagggctggt gtctgcccat gttgccatcc tgatgggctg cttgccacaa tgagggatct
                                                                      120
tetteaatae ategettget tetttgeett tttetetget gggtttttga ttgtggeeae
                                                                      180
ctggactgac tgttggatgg tgaatgctga tgactctctq qagqtqaqca caaaatqccq
                                                                      240
aggcctctgg tgggaatgcg tcacaaatgc ttttgatggg attcgcacct gtgatgagta
                                                                      300
cgattccata cttgcggagc atcccttgaa gctggtggta actcgagcgt tgatgattac
                                                                      360
tgcagatatt ctagctgggt ttggatttct caccctgctc cttggtcttg actgcgtgaa
                                                                      420
attcctccct gatgagccgt acattaaagt ccgcatctgc tttgttgctg gagccacgtt
                                                                      480
actaatagca ggtaccccag gaatcattgg ctctgtgtgg tatgctgttg atgtgtatgt
                                                                      540
ggaacgttct actttggttt tgcacaatat atttcttggt atccaatata aatttggttg
                                                                      600
gtcctgttgg ctcggaatgg ctgggtctct gggttgcttt ttggctggag ctgttctcac
                                                                      660
ctgctgctta tatcttttta aagatgttgg acctgagaga aactatcctt attccttgga
                                                                      720
gggaaagcct attcagccgc ggggtgtttt ccatqgqcca aqtcatactc aqcccctcqc
                                                                      780
acagagacgg ccaaaatgta tgctgtagac acaagggtg
                                                                      819
     <210> 3595
     <211> 1843
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (258)...(1366)
     <223> similar to gi4586963 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3595
ctggtattca tacagtgaca gagggagtgt ttttagaaat ttatagctgt ttctaggtga
                                                                       60
aaacactggt tgatttagct cccttggtaa gagcactgag cagaaagaag ttccctatca
                                                                      120
aatgggtgtg tggagcagcc ctgttctccc catcccgtag agctccagga agttaaccag
                                                                      180
ggacttcage tgegacetge agatttetaa geceeeetgt tatttetetg tettttaegg
                                                                      240
gcctgtgtat ttcagacttg gtggtggcag tcaacggggt ctggatcctc gtggagacat
                                                                      300
ttatgctgaa aggtgggaac ttcttctcca agcacgtgcc ctggagttac ctcgtctttc
                                                                      360
taactatcta tggggtggag ctgttcctga aggttgccgg cctgggccct gtggagtact
                                                                      420
tgtcttccgg atggaacttg tttgacttct ccgtgacagt gttcgccttc ctqgqactqc
                                                                      480
tggcgctggc cctcaacatg gagcccttct atttcatcgt ggtcctgcgc cccctccagc
                                                                      540
tgctgaggtt gtttaagttg aaggagcgct accgcaacgt gctggacacc atgttcqagc
                                                                      600
tgctgccccg gatggccagc ctgggcctca ccctgctcat cttttactac tccttcgcca
                                                                      660
tegtgggeat ggagttette tgegggateg tetteeceaa etgetgeaac aegagtaeag
                                                                      720
tggcagatgc ctaccgctgg cgcaaccaca ccgtgggcaa caggaccgtg gtggaggaag
                                                                      780
gctactatta tctcaataat tttgacaaca tcctcaacag ctttgtgacc ctgtttgagc
                                                                      840
tcacagttgt caacaactgg tacatcatca tggaaggcgt cacctctcag acctcccact
                                                                      900
ggageegeet etaetteatg acettttaea ttgtgaeeat ggtggtgatg aegateattg
                                                                      960
togoctttat cotogaggoo ttogtottoo gaatgaacta cagoogcaag aaccaggact
                                                                     1020
```

```
eggaagttga tggtggcate accettgaga aggaaatete caaagaagag etggttgeeg
                                                                    1080
tcctggagct ctaccgggag gcacgggggg cctcctcgga tgtcaccagg ctgctggaga
                                                                    1140
ccctctccca gatggagaga taccagcaac attccatggt gtttctggga cggcgatcaa
                                                                    1200
ggaccaagag cgacctgagc ctgaagatgt accaggagga gatccaggag tggtatgagg
                                                                    1260
agcatgccag ggagcaagag cagcagcgac aactcaqcag caqtqcaqcc cccqccqccc
                                                                    1320
agcagecece aggeageege cagegeteee agacegttae etageceage geoegaaage
                                                                    1380
cgtctcttct atgcaataac acaatagtat tactctactg cgatgtacgg aactgcggtg
                                                                    1440
tgtgtacaca tactcacgta tatgcacata tttatataca ggaagaaaaa agacagacaa
                                                                    1500
gatggggctt ggtttataac caccttgccc tgtcttcctt aactccaqaa qccaqtttqq
                                                                    1560
tgaggggtgg gggtgcggcc accaggtctg agctcttcct actqtqqaaq qctccaqaaq
                                                                    1620
qcccttcaca aggagacccc tcacctggat ccagtcgact gcggggcttg cccctcatgt
                                                                    1680
gggctggcct ccatcggcca cgtccaaagc tgtcactgct actgcttcaq gctcacatcc
                                                                    1740
ccccgacctg atggcgtgcc cgcccctct ccctgcgggc catgccacag gtttctgtgt
                                                                    1800
tttgctttag ggacagaacc acttaggaag gaaagaactc ccg
                                                                    1843
```

```
<210> 3596
     <211> 4917
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(4917)
     <223> similar to gill36426 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3596
aggactacat cgagaagcac tgcccgagcg ccgtggtgcc ggtggagctg cagaagctgg
                                                                       60
eceggggeag cetggtggge ggegggegge ageggeeece geagaceeeg etgegeetge
                                                                      120
tggtggacgc cgacaactgc ctgcaccgcc tctacggcgg cttctacacc gactgggtca
                                                                      180
gcggcggcca gtggaaccac atgcttggct acctggcggc gctggccaag gcctgcttcg
                                                                      240
geggeaacat egagetette gtettettea aeggegeget egagaaggee eggetgeaeg
                                                                      300
agtgggtcaa gcggcagggc aacgagcgcc agacggcaca gcagatcgtc agccatgtcc
                                                                      360
agaacaaggg caccccgccg ccaaaggtct ggttcctgcc gcccqtctgc atggcccact
                                                                      420
gcatccgcct ggcgctcatc cgcttccacg tcaaggttgc acagagcatt gaggatcacc
                                                                      480
atcaggaagt gattggtttc tgcagagaga atggtttcca tggcttggtt gcgtatgact
                                                                      540
ctgattatgc actgtgcaac atcccctact atttcagtgc ccatgcccta aaactgagcc
                                                                      600
ggaacgggaa aagtteteae cacaageeaa tatetgatge atgaagttge caageaactg
                                                                      660
gacctgaatc caaatcgttc tectattttt getgetetet taggaaatca cattetgeet
                                                                      720
gatgaagatc tggcttcctt tcactggagt ttacttggtc cagaacatcc actagcctca
                                                                      780
ctaaaggtcc gggcccacca gctggtcttg ccaccttgcg acgtagtgat caaagccgtt
                                                                      840
gctgactatg tacgcaacat tcaggacacc tctgacttgg atgccatagc taaagatgtt
                                                                      900
ttccagcatt cacagtctag aacagatgac aaagttattc gatttaagag agcaattgga
                                                                      960
tattattcag cgactagtaa gcctatgtca tttcatccac cacattactt agcagccaga
                                                                     1020
eceggteegt ttggaatgee tgggatggtg eegeegeatg tteeteetea gatgeteaae
                                                                     1080
attccgcaga cctctctgca agcaaagccc gtggccccac aggtgcccag cccagggggc
                                                                     1140
gccccgggcc agggtccata cccgtacagc ctctctgagc cagcacctct cactttggac
                                                                     1200
acgagcggga agaatctgac ggagcagaac agctacagca acattcctca cgaagggaag
                                                                     1260
cacacgccgc tgtatgagcg gtcctcqccc atcaacccqq cccaqaqcqq caqcccaac
                                                                     1320
cacgtggatt ccgcctactt ccctggctct tctacatcgt catcttccga caacgacgag
                                                                     1380
```

```
ggcagcggag gggcgacaaa ccatatcagc gggaacaaga ttggctggga gaagacggga
                                                                     1440
agccactcag agcctcaggc acgaggagac ccaggagacc aaacaaaggc agaaggctcg
                                                                     1500
tccactgcct cttcaggaag ccaactagcc gaaggcaagg gaagccagat gggcactgtc
                                                                     1560
cagocaatco ogtgootoot gtogatgooc accaggaaco acatggacat caccacacot
                                                                     1620
cccctgcccc ccgtcgcacc tgaggtgctg agagtggccg agcacaggca caagaagggg
                                                                     1680
ctgatgtacc cctacatctt ccatgtcctg acgaagggtg aaatcaaaat tgctgtttct
                                                                     1740
attgaagatg aagccaacaa ggacctgeet ceggeegete tgetetatag gecagttegt
                                                                     1800
cagtatgttt acggagtcct gtttagtttg gcagaaagca gaaagaaaac tgagagactt
                                                                     1860
gcttttagaa agaacagact tccaccagaa ttttcaccag tgatcattaa agaatgggca
                                                                     1920
gettacaaag gaaagtetee teaaaceeeg gaaetggttg aagetettge etteagggag
                                                                     1980
tggacctgcc ccaacctgaa gaggctgtgg ttgggtaagg cggtagagga caagaaccgc
                                                                     2040
aggatgaggg cetteetgge etgeatgagg teggacacee cagecatget caaceetgee
                                                                     2100
aacgtgccca ctcacctcat ggtgctctgc tgcgtcttac ggtacatggt gcagtggccg
                                                                     2160
ggagcacgca teetteggeg teaggageta gatgeettee tggeteagge getgteece
                                                                     2220
aaactctacg agcctgatca gctccaggag ctcaagattg agaacctaga tccccgagga
                                                                     2280
attcagctat cagctctctt catgagtgga gtagacatgg ccttgtttgc aaatgatgca
                                                                     2340
tgcggacage caateceetg ggaacaetgt tgteettgga tgtattttga tgggaagete
                                                                     2400
ttccaatcca aactcctcaa agccagccgg gaaaagaccc cactcattga cctctgtgat
                                                                     2460
ggtcaggctg atcaggctgc caaggtagag aagatgcgcc agagcgtcct cgaggggctc
                                                                     2520
agetteteca ggeagageea caegeteeet tteeegeege caeetgeeet geeettetae
                                                                     2580
cctgcctctg cgtacccccg gcactttggg cctgtcccac cctctcaggg cagggcaga
                                                                     2640
ggctttgcag gcgtctgtgg ctttggaggc ccctatgggg aaacggtagc aacaggccct
                                                                     2700
taccgtgcct tccgtgtggc ggcagcatcg ggacactgcg gagccttctc aggcagtgac
                                                                     2760
agcagcagga ctagcaagtc ccagggcgga gtccaaccta taccttctca gggaggcaaa
                                                                     2820
ctaaaaatag ctggcactgt ggttggccat tgggctggga gcaggcgggg ccgtggggc
                                                                     2880
cggggggcctt tccccctgca ggtggtttct gtcggaggac cagctagagg gcgtccaaqa
                                                                     2940
ggagttattt ccaccccagt gattagaaca tttggaagag gtggaaggta ctatggcaga
                                                                     3000
ggttacaaaa accaggcagc aattcagggc agacctcctt atgctgcttc agcagaagaa
                                                                     3060
gtggccaaag aacttaagtc aaaatctggg gaatcgaagt cctctgctat gtcttcagac
                                                                     3120
gggtccctgg ctgaaaacgg agtgatggcc gaggagaagc cggctcccca gatgaacggg
                                                                     3180
agcacgggtg acgccagggc ccccagccac tctgaaagtg ccttgaataa tgactctaaa
                                                                     3240
acgtgcaata caaatcctca tttaaatgca ctaagtacag acagcgcttg ccgcagagaa
                                                                     3300
gctgctctgg aggcagctgt cttaaataaa gaagagtaaa cttattttt atagagggtg
                                                                     3360
aaggatgctg gaagggtaag gatttaggaa tatctggaga gaaagagagc ctgcagttat
                                                                     3420
gtacattttg tcctttccgt aagagaaaaa tgaggacttt ggaaattcag atccctcttt
                                                                     3480
gatatcagag atttaaacaa cacattttta gttttaacca gttgtagtca aaatgctaca
                                                                     3540
ataaaacaaa aaagagaaag aaaatgaaga gcatttgact cccgcactta aaatgaagta
                                                                     3600
cacataaagt ttaaactggt tatgacaaaa gcctatagtt gtgtttcttg aactataaag
                                                                     3660
aaaacaaatt ttggcagtct ttaagtatat atagcttaaa atataatttt tagcatttgg
                                                                     3720
caccatatgt atgccattat atttgatttt gcattactgt ttcacaatga agctttcttt
                                                                     3780
aaggctttga tttttatgat tatgaaagaa ataaggcaca accacagttt ttctttctta
                                                                     3840
aatttcatca ctgttgatgt ggttcttttg tgttaaaaaa aaaaagtgca actatcaaaa
                                                                     3900
ctaaaaaatt atagagtaat attgccgttc tgctgatttt aaatatacaa tacatcatac
                                                                     3960
atactttaca agcaagttaa atggagataa agttgaaatc atagaagatg caaatgacct
                                                                     4020
ttcaaaatca acacaatgtg ttctgaaact ttcgtgacta ataccatgca tctgtgatca
                                                                     4080
atgaactatg tggttttgaa tcggatgtag accattagta ctactacttg agctaaactt
                                                                     4140
ctgcatggtt cataattttt aaagtgtgta gttaatatgc atgttatcgt cctttcttcc
                                                                     4200
attcttaaca gtatgtgccc atttgcaaaa caaaaatgct aataatcagt aatagtccta
                                                                     4260
taaaagatgt taactctgtt tagtcattga ctgatcttgc tctaacctta aaattttgtg
                                                                     4320
attattgacc tctgttgcat ttattctaaa gccccccaaa aattatctag ccgtttcgaa
                                                                     4380
tatcaacatt accctggtgt attcactgct gtatgcatta ttgttctttg ttgctgtttt
                                                                     4440
atgccttcat attagcaaat atgaaattct gtgaaaaaaa accctttgat cttaaaaaaa
                                                                     4500
aaaaaccacc cccccttct gtagcaggaa acaaattgct tgttcttgag aactttccca
                                                                     4560
tcaagaattt agtagaagca ggtatacttc tatcattttg atgtttttgt taatgtttcc
                                                                     4620
aaacaatgta ctttgaaatc agaatcactt cttatcgttt tcatatactt ctgatgctct
                                                                     4680
tcatcacatt agtgatcaga aatgaggtgt aattccccaa cccctgcccg caagagctaa
                                                                     4740
gtaggatett actgtaagtt gaagggagtt ttgccctaac tcatggattg tgcaagaatg
                                                                     4800
```

```
<210> 3597
<211> 2401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1608)

<223> similar to gi4102707 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3597 cagcttcccg gtcaggtacc tgggtcacgt ggaggtagag gagtcccggg gaatgcacgt 60 gtgtgaagat gcggtgaaga agctgaaggc gatgggccga aagtccgtga agtctgtcct 120 gtgggtgtca gccgatgggc tccgagtggt ggacqacaaa accaaqqatc ttctqqtcqa 180 ccagaccatc gaaaaggtct ccttttgtgc tcctgaccgc aacctggaca aggctttctc 240 ctatatctgc cgtgacggga ctacccgccg ctggatctgc cactgttttc tggcactgaa 300 ggactccggc gagaggctga gccacgctgt gggctgtgct tttgccgcct gcctggagcg 360 aaaacagcga cgggagaagg aatgtggggt cacggccgcc ttcgatgcca qccgcaccag 420 ettegeeege gagggeteet teegeetgte tgggggtggg eggeetgetg agegagagge 480 cccggacaag aagaaagcag aggcagcagc tgccccact gtggcttcct ggccctgccc 540 agcctgggca cgtgtccccg acaccagcca ccacatcccc tgtgtgagaa gggtgaggca 600 ggcacccctg tggctgcagg caccactgcg gccgccatcc cccggcgcca tgcacccctg 660 gagcagctgg ttcgccaggg ctccttccgt gggttcccaq cactcaqcca qaaqaactcq 720 cctttcaaac ggcagctgag cctacggctg aatgagctgc catccacgct gcagcgccgc 780 actgacttcc aggtgaaggg cacagtgcct gagatggagc ctcctggtgc cggcgacagt 840 gacagcatca acgetetgtg cacacagate agtteatett ttgeecagtg etggagegee 900 agcacccagg gccaccacct gccacaacag ggacttctgc ctggggtgag ccctcccgtg 960 ccccctgcag ctgccttcca gcctgggcac aagcggacac cttcagaggc tgagcgatgg 1020 ctggaggagg tgtcacaggt ggccaaggcc cagcagcagc agcagcagca gcagcagcaa 1080 1140 accatgeete etgeeetgea geettteeee geeeeegtgg ggeeetttga egetgeaeet 1200 gcccaagtgg ccgtgttcct gccaccccca cacatgcagc ccccttttgt gcccgcctac 1260 ccgggcttgg gctacccacc gatgccccgg gtgcccgtgg gtgggcatca caccctcaca 1320 gatggtggca aacgccttct gctcagccgc ccagctccag cctcagcctg ccactctgct 1380 tgggaaaget ggggeettee egeeeeetge catacceagt geeeetggga geeaggeeeg 1440 ccctcgcccc aatggggccc cctggccccc tgagccagcg cctgccccag ctccagagtt 1500 ggaccccttt gaggcccagt gggcggcatt agaaggcaaa gccactgtag agaaaccctc 1560 caaccccttt tctggcgacc tgcaaaagac attcgagatt gaactgtagc ccgagccgcc 1620 ecacceacte cateatetee aggtgeecea egeetggggg tggaggeaca aceteteece 1680 taaccctgct ccctggggct gcgccctca acaccctctc aacacccccc tccctcaacc 1740 accccgacaa ccactacaga accaacattg tgacgcccag gttgcaacag gatggaattc 1800 agggacggac ccagcctggc taagggaacc atttcactgc cggacttagg ctggcaatgc 1860 ccccttcccc aaccccagac acaggggttg gccacaatcc cactgaatgc ccttggttca 1920 cactccattt cccagtttct gttgaccccc accttccagt gttggacagg atggagggg 1980 gacacttgct taggggctct cctgggcccc acaccagtgc ccaccccaaa tctggtcgtc 2040 tectecece atgeacagea caagetaagg getgeeetet geecacaege tgegtteact 2100

```
gccaatgctg tactcacctc catcacctc caactttggg gcccatgtct tccttgggcc 2160
aaggtctcat gggggctagg gccaagttgg gggcccagga ggcggggagg gaggaggagg 2220
agaagatgcg cagttacctc atgtcggtgc ccgctgggga ggggtccggg aagaagggga 2280
aggggtgcct ggcgggtact tttctatctt ttatttccag attttttttg tatctaaact 2340
tgaagatttg tattatacaa ggacagccaa taaaggaaga atataatggt gaaaaaaaaa 2400
a
```

```
<220>
     <221> misc feature
     \langle 222 \rangle (103\overline{3}) \dots (331)
     <223> similar to gi3746840 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3598
ttttttttt ttagtgcaag aaatgctgca tcattgaagc acttgagaat taccatgaaa
                                                                        60
tctaacaaaa aatgtcatca actcaggagt aataataaaa aagagaaaca accagagagg
                                                                       120
cacacagatt gttgttttt taaaaggatt tttatactat attaaaaaac cacaaaataa
                                                                       180
aaaagggatc aatcaacata tatcttagaa gtccttccaa gagtcttggt atgcaacagc
                                                                       240
catggagget gtgacetttt teettettt eteageetge agtteattta aggateaceg
                                                                       300
gagatgactc gtgctctagt tcttaaaatc aaacttgttc tgccaaatcc aagaccctga
                                                                       360
atttgtccaa attgtagaaa catgctttta ccacccgtcc accaaaatac ctcccattca
                                                                       420
agtcaacaac cgctttaatt gctgattcaa ctctctcaaa ttctaaaaat atccgtactg
                                                                       480
cttcatcatc aggggcacca ggaatttcaa atatcacaca ttttccaact ttgccatatt
                                                                       540
tttcacattc ttccttggtt tcaacttcca agtcttcatc cacctctccc gcaccaacca
                                                                       600
tgttccttag taagaccact ttagtaggac acttaagtat ttcagtcagc ggatttgaat
                                                                       660
ctgacttctt ggatgcatct ttctctgtgg cgtcgcccac gatgatcttg ccgccacgct
                                                                       720
tgctggtctt ctccactgac aaggcagtgc tcagqccctg ctcatgcttc cccagaccct
                                                                       780
ggccctcccg gaagccgtac ttctgcatga tcttgtgcgc caccgtgccc cccaagttag
                                                                       840
cgaggaagga gttgcgctgg gccgggttgg agatctcggt ctgtcttgtt cctcgtacac
                                                                       900
tgggggagga atggcagttt tggaagactg tgatcgaggt cttgagtcct cttcataagg
                                                                       960
aaaatctcgg ggtaactgtc ttttactgcc agagaagtgg gtgaggcaat ggcagctccg
                                                                      1020
cccatacttg ttt
                                                                      1033
```

```
<210> 3599
<211> 1471
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1472)
```

<210> 3598 <211> 1033 <212> DNA

<213> Homo sapiens

```
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1436)...(738)

<223> similar to gi3165570 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3599 cctttttttt ttttttaggt tttagcagca cttttacttc cacatccaaa ctccctgggt 60 cctcacaaca gccctgtgag gtaggtaggg taggaaggtt tcagagatcc ccatttatag 120 atgaggatgc tgaggcacag agaggtgaag tgacttgtcc aaggtcatac aaccagcagt 180 gtagagggct caaagccagc attoctccac ttgaactcct gcgctccggc cctctggcag 240 ttcccacatc ctctctattc tctctgtgtc ccccaccctc tcaactctcc tgggtctgca 300 gggaccctaa aggcagcctg gcagctgaga tttttcagga atggcaactg gggtaggcct 360 ggtcaactcc agataggaac tgaccctgaa gagcatgagg ccagctttgc ttctccccat 420 ttcccagttg gatggaaggc ctagtaggtc ccagggcaag gatggagcta ggcatgattc 480 atgaacgaat ggtgataaag gtaggtgtaa gcatatgtgt gtcctgcact aaagacaaag 540 gctcccctaa cccaaggccc caaggcagtg tttcaagtgc tcacccccat gcctctctca 600 teccacagag ecacagtgag tgteeteage ageaaaagga geeatagaaa tagetgeete 660 tggcaatgag ctgctccagt ggacagctcc caccaagcct tcagacccca tcacgcagac 720 acagtgeete caeggettga etggggeeet gggeeacace eccaataaca aacageeggg 780 gcccagcctg cagactagag caggagcagc gggcagtggg catggcaggc aatgcctccc 840 agcgccgccg tgcaaggcta aagctctcca cagagcccaa aggacatggc tggtttccaa 900 ggcccccaat ggccacaatg tggcccccaa gggacccaac cacaaagtct gccctcttat 960 ccctcatgcg caggctgcgg ggcaatttgg tccaggaccc atgctccagg tcaaacatct 1020 ccacagtgtt gacaaagtgt gggcgagagt agaagttgtg gggcccaggc tgctgcaggc 1080 cacccagget aaagacgetg cetteageea tggcgcagee agcaaaggee cgacggetgg 1140 gtaggcttgg atgccgggtc catgtacggg cctccagatc aaaggcttca aaagcagtca 1200 ccgggagctt gccctggcgg cccccagga catagatctt gttcccgtgc aggaaggtgg 1260 aggccccata gcagggtgtg ggcatggagg gtagcgaaag ccagcagtcc cgacggggct 1320 catacacacg tacctgggcc tggggggccg tgtcaqqqcc cattcccccc agagcataca 1380 ccataccatc cgccggtgct acgatgctgc cagggtacgg ggtccgccgt tccgctggca 1440 cgaggcctcg aactgagtan nnnnttccat g 1471

```
<210> 3600
<211> 949
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(318)
<223> similar to gi2645205 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3600

```
agccccatca gtaagaagcg gaaacgaaag ggatcttgcc agagacgaag aagcgcaaga
                                                                       60
aacgcaagtc agaggatgcc acgccagcgg aggatggcac acctgcagcc accgcgggag
                                                                      120
ccagccccc agcatgggca ggaagaagag gaacaggaca aaggctaagg tcccagccca
                                                                      180
ggcaaacggg acgccaacca ccaagagtcc agcccctggc gcccccaccc ggagccccag
                                                                      240
cacccctgcc aaatccccaa aactgcagaa gaaaaaccag aagccacccc cggttctggg
                                                                      300
ctgggaccct ggctccaggg ccatgtccag ggctctggtg tttgcctggg ttggtgcagg
                                                                      360
ttgatgtgct ggctgcaggc aggtgtgacc atctctcgtg cctgccacct ctttgcccc
                                                                      420
aggetttttt getgtgaggg ageeaceagg gggtgattta aataggttta tttetteatt
                                                                      480
tacaagagga atatatttgg cttctctctt aagactctga gattcacaat cagcagctct
                                                                      540
aaaaaataaa ggagcagttt ggcttccgga aggaagagga ggcaacactc ggacctggtt
                                                                      600
cttgtacaac aagaaaacat cgctggggcc ccgctgaggc tggagtgggg qtgqagqctg
                                                                      660
gtctttggag gatgccaccc ccaccccatc ctcttgtcag gccctcgggg taccccagag
                                                                      720
cttggtgggt gagtattcca cctgcttaca caccactgaa ggccacagcc aggccagtta
                                                                      780
cttagggggg caagaaagag cattgtccaa gctggctctt ggggggggtc ccccattggc
                                                                      840
cacaaaggcc tcacccccca ccccatcccc gtaaccagaa accaccttga ttgcagcaga
                                                                      900
aattcaggca gatgggtagc gcaggggggc taaccccccc acaagcggg
                                                                      949
```

```
<210> 3601
     <211> 1459
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(987)
     <223> similar to gi808915 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3601
ctggcgggcg tgggaaccca ggccccgccg aggcggccag gaggtgagat ggcagctggg
                                                                       60
caaaatgggc acgaagagtg ggtgggcagc gcatacctgt ttgtggagtc ctcqctqqac
                                                                      120
aaggtggtcc tgtcggatgc ctacgcgcac ccccagcaga aggtggcagt gtacagggct
                                                                      180
ctgcaggctg ccttggcaga gagcggcggg agcccggacg tgctgcagat gctgaagatc
                                                                      240
caccgcagcg acccgcagct gatcgtgcag ctgcgattct gcgggcggca gccctgtggc
                                                                      300
cgcttcctcc gcgcctaccg cgagggggcg ctgcgcgccg cgctgcagag gagcctggcg
                                                                      360
gccgcgctcg cccagcactc ggtgccgctg caactggtat ctgcgcgccg gcgccgagcg
                                                                      420
gctggaggct ttgctggcgg acgaggagcg ctgtttgagt tgcatcctag cccagcagcc
                                                                      480
cgaccggctc cgggatgaag aactggctga gctggaggat gcgctgcgaa atctgaagtg
                                                                      540
cggctcgggg gcccggggtg gcgacgggga ggtcgcttcg gcccccttgc agccccggt
                                                                      600
gccctctctg tcggaggtga agccgccgcc gccgccgcca cctgcccaga cttttctgtt
                                                                      660
ccagggtcag cctgtagtga atcggccgct gagcctgaag gaccaacaga cgttcgcgcg
                                                                      720
ctctgtgggt ctcaaatggc gcaaggtggg gcgctcactg cagcgaggct gccgggcgct
                                                                      780
gcgggacccg gcgctggact cgctggccta cgagtacgag cgcgagggac tgtacgagca
                                                                      840
ggccttccag ctgctgcggc gcttcgtgca ggccgagggc cgccgcgcca cgctgcaqcq
                                                                      900
cctggtggag gcactcgagg agaacgagct caccagcctg gcagaggact tgctgggcct
                                                                      960
gaccgatccc aatggcggcc tggcctagac caggggtgca gccagctttt ggagaacctg
                                                                     1020
gatggcctta gggttccttc tgcggctatt gctgaacccc tgtccatcca cgggaccctg
                                                                     1080
aaactccact tggcctatct gctggacctg ctggggcaga gttgattgcc ttccccagga
                                                                     1140
gccagaccac tgggggtgca tcattgggga ttctgcctca ggtactttga tagagtgtgg
                                                                     1200
ggtggggggg acctgctttg gagatcagcc tcaccttctc ccatcccaga agcggggctt
                                                                     1260
```

```
acagccagcc cttacagttt cactcatgaa gcaccttgat ctttggtgtc ctggacttca 1320 tcctgggtgc tgcagatact gcagtgaagt aaaacaggaa tcaatcttgc ctgcccccag 1380 ctcacactca gcgtgggacc ccgaatgtta agcaatgata ataaagtata acacggattt 1440 tgatgtgaga aaaaaaaaa 1459
```

```
<210> 3602
<211> 2416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2417)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2383)...(2122)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3602
ttttttttt ttttttca caagttatat tttattttaa cacgaggatt aacatatagt
                                                                       60
tacaaggtca atacaagcct ccagtggaag ctctttattt ggtttaattc catctccaga
                                                                      120
gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc
                                                                      180
ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag
                                                                      240
gttaaaatag aattctggac ctttttaaaa agtttttgga tgatataagc acaggaggca
                                                                      300
gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt
                                                                      360
tttgacgtcg tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct
                                                                      420
ttgcgctgcg ctggttagac aagccgcagg cttatctcca cggtgagcag gataaaaacc
                                                                      480
cccaaggaac agcccatgac aaccttctgt gcctttttat actttcccat cctacaaagg
                                                                      540
aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcagggc
                                                                      600
aggttctttt aaaattagtc atcttacaac acaacagtat tctagcacgg tggcgaagtg
                                                                      660
acaggcggca gatacggggg aggaaggaga cgttcacggg aaattccaca ttctactcta
                                                                      720
tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca qagtaaatga
                                                                      780
tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc
                                                                      840
atggagccac gcagactggc ccggaagcaa cacccaggtt caacatttaa gagcactcgc
                                                                      900
tataacattc tttttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac
                                                                      960
ggggggatac aagcatatcc tatactgggg gtgacggtca ttcaaagagc aaattactgc
                                                                     1020
agcttatatc ttttccacta tgttgcaaga aatgaatcta tcctgaccca taatatgaaa
                                                                    1080
gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat
                                                                    1140
cctcgtggag tggagagtgg tccacttgac ttggtgaggt cagaagttcc tgaaqatccc
                                                                    1200
tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat
                                                                    1260
geacetgttg gtttgeaggg acagaggtge ggeettgaet etteteacee tgtgteatee
                                                                    1320
gggcttgtct ttcgtctgtc aagtcagtcc tcctgcgtga ctgatgggtg caccacgctt
                                                                    1380
aggtcacccg ttgcagggac cggaagtcca tggctctqcc qcaaccctqa qcqqtttgca
                                                                    1440
gtccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa
                                                                    1500
gccacttcct cttcacctgc ctgggcctca gcgtctctgc gcttgtggtt tctcqtcccc
                                                                    1560
gagggctgac tgagctgctc cggaagggtg gtgtgtggtc aaccttggtt ggctgagagg
                                                                    1620
agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccg
                                                                    1680
```

<210> 3603 <211> 1190 <212> DNA

```
tccctgtccc tttggcttct ataggacttc cttgtcttag attcataaac agcaagaga
                                                                    1740
actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgccc
                                                                    1800
gacatcatcc ccaggcttcc gtggcgctct cggtcacagg agctttaggc caatggttcc
                                                                    1860
tcttgactgt ttttgcccca aatgagagga ggggctgctt tgctttaagg cgtggcggcg
                                                                    1920
ggggggggt ggtggccaca gattagggga cctcaggttt tcctcaaaaa cccacacagg
                                                                    1980
gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg
                                                                    2040
ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacgagagg cacggggtct
                                                                    2100
ttggtgatga aagtgctaac ctcggcgggg tgcqqtaqct cacacctqta atctcaqcac
                                                                    2160
tttgggaggc tgaggcgggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa
                                                                    2220
cacqgtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc
                                                                    2280
ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga
                                                                    2340
ggttgtagtg agccgagatc atgccactgc actccagtct gaacaataga qcgagactcc
                                                                    2400
cgtctcaaaa aaaaaa
                                                                    2416
```

```
<213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(493)
     <223> similar to gi4056479 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3603
geggeegeeg tggeegaget geeggtgetg gaegeeegeg ggeagegggt accegttegg
                                                                       60
egegetgtte egggagegee gegeegtggt ggtqtteqtq eqqeatttee tqtqttacat
                                                                      120
ctgcaaggaa tacgtagagg atctggccaa aatccccagg agtttcttac aagaagcaaa
                                                                      180
tgtcaccctt atagtgattg gacagtcatc ctaccatcat attgagcctt tttgcaagct
                                                                      240
gactggatat teteatgaaa tetatgtega teetgagaga gaaatttata aaaqattggg
                                                                      300
aatgaaaaga ggtgaagaaa ttgcttcctc aggacagagc ccccacataa aatcaaatct
                                                                      360
acteteagga ageetteaga geetgtggeg ggeagtgaet ggeeetetet ttgattttea
                                                                      420
aggagaccca gctcagcaag gtggaaccct cattttaggt ccaggtaaca acatccattt
                                                                      480
tatacaccgc gataggaata ggttggatca caaacctatc aactctqttt tacagcttqt
                                                                      540
aggagttcag catgtgaact ttacaaacag accttcagtt atccatgtgt gacttaaaat
                                                                      600
gcactcagtc actttcaact ggaccttctg gaatgtgacc ttcaatgcct gggtgtaata
                                                                      660
teetegtgea gtgtetaace tgetgteeet teecageett tgaggagtta gggaageata
                                                                      720
aagggggctt gaacctgttg aattgcatgc tgggaagcat cagttgtcaa aatatgttat
                                                                      780
atacttccat tttataactt ttaacatttt atacaaaaaa aatgaatata caaaatataa
                                                                      840
ctttaaaagc tataaaatca taaatactct aaattatttt acattatggt atattcagtc
                                                                      900
aatgaaagag ttttttggca atataaattc tgacagtata taaggggaca ggaqaacaac
                                                                      960
acaagaccat tatattcagt gaagaaggca aaatatcaaa tctgtcaaca atgtaactgc
                                                                     1020
atttttatat gtatattt gtatttttgt atgctttgga aaaagacagg aaataaacac
                                                                     1080
caaaatgttg ccagtaggta tctctgtgtt aagattagcg ctattatttt cttttctgta
                                                                     1140
cttttctgta tttcccaact gttatataat qaqcatgatt aatattgtag
                                                                     1190
```

```
<210> 3604
     <211> 449
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (21)...(160)
     <223> similar to gil408211 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3604
aaaacttttg ttttttttt ttgaaagctg cacagcctga aattaccttt attcaattaa
                                                                       60
tgcaaaaaca aaaggggaga tgttggaggc cgaaggaatg agggtcgtga ccaactcagt
                                                                      120
ataccactgg aggetetgtg ageaaacage aaactgttet catgaaagea ggatgttgge
                                                                      180
gaactgacaa actctgtctg ccgccagaag gaatgctggg ggcagtcatg tcccaggtcc
                                                                      240
cgtgctcctt gaggttatcc acaggaacat ccagaacctc cataaaggca ggccatgctt
                                                                      300
atcatcattg cagtatccaa tctgcagtgg tgctggctgc ctgttgtggg tgctcagtat
                                                                      360
ttatctccaa gtcccgcctt tcgcgcatcg cctgctgctc tcccactcag cgccacctca
                                                                      420
gtcccacaaa ggccgggctg ggatcctgc
                                                                      449
     <210> 3605
     <211> 4197
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (4198)...(1045)
     <223> similar to gi31438 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3605
tttttttttt ttctggtcag tgggggcact gggtcagatt tattgcactt gcaacagagt
                                                                       60
ttaaataagt cctgggtgtc tggtgccaag gtgagggaag ggttgggcag agagatgagg
                                                                      120
ggcagcatca gtgcagctgg caggcagaac ccaaattctg caggcccagg acagtgggct
                                                                      180
cccctttctc tggggaacag ggagggcctg tgtctggcca ggctgaggtt ccagatctgt
                                                                      240
tgccatcatg gccccttcag ggtcctggga aattcctggc ttctcctaaa tcagggtgaa
                                                                      300
ctgggcctcc aggatcaggt ctggagcagg cccaaatata gtcctggatc tgcctggatt
                                                                      360
aggtgccaat gtctgagtct gggttccaga tcaactccag accccaggct ggaatctggc
                                                                      420
cccatttgag ttctgattcc ccttggagct gggctctggg gcggccctgg gccagcatct
                                                                      480
atcettgtgt ggcatetgte etgagetggt cetggggeae catgeatagt tagtgttett
                                                                      540
tgttggccca ccagggtggg gctgtccaga gctgccaggt cttaactccc caagttccag
                                                                      600
gttettaget gggggettet tttggatete tggeaagget gaggaeagat etttgeaggt
                                                                      660
tggagctgga caggaagtcc ttgtggcatg tctggcccaa agaactgtga atggatttcc
                                                                      720
tagttatett tecaagttgt tteaggaaae tetecaaaat geaaaggett eagggagget
                                                                      780
```

```
ggggcctctg tccctggatc tgagttcccc catccatgaa gagggtatgt gtaaacaagg
                                                                      840
gtccttcaca gtgcatgggg gggagggatc cccagctcct caccccctg gctctggccc
                                                                      900
ttcaagtatg tctctgggct ggggagagga gcttctccct ggccgtcagc accttcaaga
                                                                      960
agtacccaga cccctccttt tcagtagaat gagggtgggg ggactggttc ttcaggaatg
                                                                     1020
ggagtctgaa attgggagga ctcaggcatc agaggtggct ggaggcttga gctgagcttt
                                                                     1080
ttccatggcg gtgccatatg ggagggagcg tttgaagaat ccaagcttgt agaggatgta
                                                                     1140
gatgagtaga cctaggagca ggaggccaaa caggatggct caggatgatg atccccagtg
                                                                     1200
ggacgccata gctgccttct cgccttggtc ccattgcaca gctgtggccc accctqacqc
                                                                     1260
tctttttggg ggcagctgcc gaggcaggat tcggtagggc atcttcaggg ctttgtacac
                                                                     1320
agcctcacac tgcaggctaa atggctggtg ctcccgctgc aagaaagtct tggcccagac
                                                                     1380
tcggaaatgc aactgcagac tttggctctc ttgttggtgc aggggcccga gctcacagcg
                                                                     1440
cagcctgaaa cactcagcct ccgggcattt caggatctga ggtcccgagg aagcagagct
                                                                     1500
gcggcttgga gcttcccgtt tttgctggtg gtgcagggaa ccctcgggat ccaactccag
                                                                     1560
gccctttggg ttaatggggt gattggtggt gcagttgagt cccgtaactc tggtcacata
                                                                     1620
taggagetge tgacetteca gageetgggg acagetgagt tecageacae cetggetaat
                                                                     1680
ggagctgggg ccttggttga tgagctcata gacatggtgg acagcaggtc ccaggtcctc
                                                                     1740
ctccttctga ggctggtctc ggggatgcca gtcgcttact gggaatagca ctgcctcagg
                                                                     1800
cttggagaca ccgttcaggg tgacctgggc ctgagcctcc acggagagcc gaaaggaaac
                                                                     1860
cacgtcgctt tgcgagttgt tgagattctt gctgaggatc tggaagtcaa actggatggt
                                                                     1920
tttcttagtg tcccggagat gagggactgt aaaccgaagg ccaccccaca gactggctcc
                                                                     1980
tgccttcatg gggttgccca ggtcacacac cagcaggcgg ctctggttca cggcaaagta
                                                                     2040
gtcacagctc aggctggaga agttccctgg gtgtctgacg agtcctgagt actcagcctc
                                                                     2100
tggaggggg gtgacccgaa gctcagcctc ataggcgcca ccctcaccca cattctgggc
                                                                     2160
atggaaagtg aggttcaggg cattettgte acceaggtae acatggttet geteeceaaa
                                                                     2220
cacttccage tgcaggtcag gcacacagat gttgtcttct ccacagtcca gcaagatctg
                                                                     2280
ageettgtee tetateegge tettgetetg ataatgtagg getggeetga ggeegtgget
                                                                     2340
gtccactggg gcttgggggt ccaaggagaa gttgagagcg atgtgaatcg gcgagagttt
                                                                     2400
gtctcgaaat tctgactcgt tcctgaggta gatcttcatc tctctgcaat cctctcgagc
                                                                     2460
cccattctgg atgagcaggg tctgggtcag ggttgcctgc ctggaggcca ggaacagtgc
                                                                     2520
ccgccgtacc cctcccttct gcttctgcca gtccagctga agttccactg tgaaaccaat
                                                                     2580
ggagtcagca acgtgttttc cagaagcatt gaggcagaag ctaaggttga tgcaggccac
                                                                     2640
agggttcccc tctaagctgc agctccgctc ctctgggttg aacatggcgg ggaagatggt
                                                                     2700
gagggaggca ctagcggaca cgatggggcg gcccctgtat accacagcct tgtccacacc
                                                                     2760
aaaggacccc acaatcagat caggatatcc attgccatcc aggtctcggc ctcctcgaag
                                                                     2820
ggcagagcca aagaagtctg gggtgtggct ggctgccac aggggctgca gaacctggga
                                                                     2880
aggettagag eccageeete etgggeeeee aggaaataca aacaetaete eetqetqqqt
                                                                     2940
ctccccacca aagggagccc cgatggccac atcattgtag ccatcctggt ccaggtcccc
                                                                     3000
caggggggtc aaggagctgc caaatcggcc aaactcatca tggccagtga gggtaagggt
                                                                     3060
gggcgtgggc tctatgccgg ctgggtgctg caggtagacg tagaccctgc ccacctcctg
                                                                     3120
aggccgcccg tcaggggtcc gatccatgag caggggtgcc cccaccagca agtcatccag
                                                                     3180
cccgtcccca ttgacgtctg tggcggccac tgcatagcca aagtaggagg ccatctgttc
                                                                     3240
ccctgagaag ttgtagaggg atcgaatgtc tgagccatta aggatggtga catagccgta
                                                                     3300
agtgaggttc cctttgggca caccagcaac aaagtcttct gtgtcatcac cactgaattc
                                                                     3360
accaacagcc acagagtatc ctaggtagct gtcatcatag atggaactgg cctggcgagt
                                                                     3420
ctgcagctgc ccctgaacca ggttgatcag gtactcgggg taataagatt ctgcaatctg
                                                                     3480
ctcctgagtg gcagacagga tctggccttg ccagaaatag cttcctggtc cacctaaaac
                                                                     3540
cacacggcca gtcttggtga actcggcact gaagcctcct tggcagtaac cctgtcctgc
                                                                     3600
tgcccagctg aaatctgagc ggcagggtgc atactccaga attcgggtga agttatctgt
                                                                     3660
ggagaggtag caggtgccca cggggtcgct cagtggctcc ttctctgtgc gccagctgta
                                                                     3720
cagtggagcg catgccaaga tggaggagcc atgggctcga actgttgccc cgaaccactg
                                                                     3780
caaggacttg tactccacag gctcctctcc ctctgagctg gacagtgagg actccaggag
                                                                     3840
ccgagagcct ttgctgtcaa attcaatggg ggtgcactgt gtggggctgg caccccaagg
                                                                     3900
acagaggtag acagcaccac cctgcagcac tcctggctgg ctggtattag ccttgggtgc
                                                                     3960
teccaecage acaetgaece egtetgttee eggeeggtaa aactecaetg agaateegaa
                                                                     4020
gaaggagccc gggggccccg agagtactgc tggggcctcc gcgtctaagt tgaagccccc
                                                                     4080
gaccctgggt ggcggcggca cgagcagcaa cagcagcggc acgagcgggg gtcggcgcg
                                                                     4140
ggggccccag cgcagctgca cggcgtggag aggggactct ggcgtccggc tccccat
                                                                     4197
```

```
<210> 3606
<211> 2353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2354)...(697)
<223> similar to gi602288 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3606
ttttttttt ttgggagaag tgggggcctt tattaaggtc tggcagatgt ggtggaggtg
                                                                       60
gaagtacaaa cccaggcctg ggcctaggaa agggcagaag aaaggcaaag ggtcccttgg
                                                                      120
agcaggaacc catccctctc tgcttatacc cagcacccct catcccaggt tcctttcttc
                                                                      180
aaccteegee tgeetetggg aacacagage accaagaact gacaaacegg gaccetecag
                                                                      240
ggccacagcg tggggcagag tccaggcttc tgtctccccg cagtgggaga tctggggagc
                                                                      300
teagtgaace teeteaceet ceettgeeag tatgaaagtt tgggaagege ettttettgt
                                                                      360
cccccagaac agaacaaact ctttgttctc tgtggtttgg gggaaaaagt gtggggggct
                                                                      420
tggacctagg aagaagctga gctgaattcc tccagggccc caggtgaaac cccccagggg
                                                                      480
agtttctgag actctagact tgccatttct ccacttttcc ttcccaatga ctccggtgag
                                                                      540
cagctcagag tctgggctag ggcaactggt aggacagtgg ggatctgccc cagagacatc
                                                                      600
tgtgggtttc agatgaaggt ttccccaaca ccagattcat ttatatgtac acagggcagc
                                                                      660
acccacctgc ggcaggggga acagccgctg ggggctagta agagtagcca cccttggggc
                                                                      720
caaatggctg ggcggggcca gccagctctg ggaggtaggc ggggctctca tccaagtggg
                                                                      780
acaaagggac tgtgtcctcc tcactgacag gccggtcaaa ctcagccttg agagctggac
                                                                      840
gctgattgtc cgggaaggcc aaagagaaga gggcctcggg ctcacacaca aacttgtaca
                                                                      900
cgtaacgctc accagccacc ttctgcatga tgcctttctc ataatagtat cggagcgagc
                                                                      960
ggctcagctt gtcgtaattc atggctggcc ggttcttctg gatgccccag agcctggcga
                                                                     1020
cctcctcagg ctcaatgagc ttgaactcca ttccccggcc cgtccaggca atgaaatggg
                                                                     1080
catttgttgg gtcatccagc aaggccacca gaaattgcca cagctgcagg gcaccccggc
                                                                     1140
gctggtaggg cggcccctct cgaaatgcac cgaccccttc ctgcttgatg tctccttcaa
                                                                     1200
atttctcagg gacaacgcag acatcatctg ggaatggtcg cagaggtttc tcatagccat
                                                                     1260
agcccatggc cccgtcacct ggagagggcc cagagaagcc ctctgtgtgg aggtacattg
                                                                     1320
atgcgcaccc ggtgacatct gagtcgtagg cgaagtccgt ctgttcctgt ttgatcacca
                                                                     1380
cccccgcccc tgggtacctg tgcccattga ccccaccctg gtccacggct ggctggcccg
                                                                     1440
cctgttcata caggggatca tggtattctt gcttaaagct ctgctgggga tagggtgggc
                                                                     1500
agggctccga cagctggtgt tggtaggggg cctgggaggg gttcccggcc ccctccctga
                                                                     1560
gatgtgaagg agtggcaaat gtccaggggc tgctggaaga cggagctatg ttccccqaqq
                                                                     1620
tacccatggc cagggtgggg ctgggaggtg ccagaggatc tcaggaaatt ccgttgctct
                                                                     1680
gcccggggaa agggctgtag gggcgactgt ccaagggcac caggggcagg ggacttgatt
                                                                     1740
ggcgatttgt ctgggggggt cataggcact ggagtaaagg cactgctcgc catggtggta
                                                                     1800
ggggagtggc ggcttcctgc tgcaggacag ggccgggtct gtgcggggac tctggggctc
                                                                     1860
cttcttgatc ctggtggtgg ggctgtggaa agctaggttt tctgaatgga aatcaggaac
                                                                     1920
aaactgetea teaetgtetg gtaeetgage tteagegage caegteteet ggaagtgaet
                                                                     1980
tagatcctgg aagagatctt cagagtcgag gggcggcagg gagcccgggt ccatgagctt
                                                                     2040
ccccagcggg ccgatcagcg cttcgcgcaa gtctcccatt tccgggcgat ttgctgctga
                                                                     2100
aggtgtaggg cacttgctgg tccaagtatc cggctttcat cctccgctcc atccggccgc
                                                                     2160
teeetegege egeaeggeeg gggeeecaag egggggeega gaeetgagge eggggegtet
                                                                     2220
```

```
gggctggagc cgcgggggt accgagcatg ccctggagcc cgcaccgagg gccgcggggc 2280 taggccggag taaggcggcc ccggcccgg gtccccagcg caccgacttg ttttcgggc 2340 gcagcagaca gtt 2353
```

```
<210> 3607
<211> 2658
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1981)
<223> similar to gi3201589 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3607 atggaccgcg gcacgctccc tctggctgtt gccctgctgc tggccagctg cagcctcagc 60 cccacaagtc ttgcagaaac agtccattgt gacctttcag cctgtgggcc ccgagagggg 120 cgaggtgaca tataccacta tgccaggtct cgaagggctg cgtggctcag gcccctgaat 180 gccatcctgg aagtccatgt cctcttcctg gagttcccaa cgggcccgtc acagctggag 240 ctgactctcc aggcatccaa gcaaaatggc acctggcccc gagaggtgct tctggtcctc 300 agtgtaaaca gcagtgtctt cctgcatctc caggccctgg gaatcccact gcacttggcc 360 tacaattcca gcctggtcac cttccaagag cccccggggg tcaacaccac agagctgcca 420 tccttcccca agacccagat ccttgagtgg gcagctgaga ggggccccat cacctctgct 480 gctgagctga atgaccccca gagcatcctc ctcctgactg ggccaagccc aggggtcact 540 gtccttctgc atgctggaag ccagccaggg acatgggccg cacgctcgag tggcgcgct 600 tacttccagc ctttggtccg gggctgccac ttggaaggcg tggccggcca caaggaggcg 660 cacateetga gggteetgee gggeeacteg geegggeece ggaeggtgae ggtgaaggtg 720 gaactgaget gegeaecegg ggatetegat geegteetea teetgeaggg teececetae 780 gtgtcctggc tcatcgacgc caaccacaac atgcagatct ggaccactgg agaatactcc 840 ttcaagatct ttccagagaa aaacattcgt ggcttcaagc tcccagacac acctcaaggc 900 ctcctggggg aggcccggat gctcaatgcc agcattgtqq catccttcqt ggagctaccq 960 ctggccagca ttgtctcact tcatgcctcc agctgcggtg gtaggctgca gacctcaccc 1020 gcaccgatcc agaccactcc tcccaaggac acttgtagcc cggagctgct catgtccttg 1080 atccagacaa agtgtgccga cgacgccatg accctggtac taaagaaaga gcttgttgcg 1140 catttgaagt gcaccatcac gggcctgacc ttctgggacc ccagctgtga ggcagaggac 1200 aggggtgaca agtttgtctt gcgcagtgct tactccagct gtggcatgca ggtgtcagca 1260 agtatgatca gcaatgaggc ggtggtcaat atcctgtcga gctcatcacc acagcggaaa 1320 aaggtgcact gcctcaacat ggacagcctc tctttccagc tgggcctcta cctcagccca 1380 cacttcctcc aggcctccaa caccatcgag ccggggcagc agagctttgt gcaggtcaga 1440 gtgtccccat ccgtctccga gttcctgctc cagttagaca gctgccacct ggacttgggg 1500 cctgagggag gcaccgtgga actcatccag ggccgggcgg ccaagggcaa ctgtgtgagc 1560 ctgctgtccc caagccccga gggtgacccg cgcttcagct tcctcctcca cttctacaca 1620 gtacccatac ccaaaaccgg caccctcagc tgcacggtag ccctgcgtcc caagaccggg 1680 tctcaagacc aggaagtcca taggactgtc ttcatgcgct tgaacatcat cagccctgac 1740 ctgtctggtt gcacaagcaa aggcctcgtc ctgcccgccg tqctqqqcat cacctttqqt 1800 gccttcctca tcggggccct gctcactgct gcactctggt acatctactc gcacacgcgt 1860 tececeagea agegggagee egtggtggeg gtggetgeee eggeeteete ggagageage 1920 agcaccaacc acagcatcgg gagcacccag agcacccct gctccaccag cagcatggca 1980 tageceegge eeceegeget egeceageag gagagaetga geageegeea getgggagea 2040

```
ctggtgtgaa ctcaccctgg gagccagtcc tccactcgac ccagaatgga gcctgctctc
                                                                     2100
egegeetace etteeegeet eeeteteaga ggeetgetge eagtgeagee aetggettgg
                                                                     2160
aacaccttgg ggtccctcca ccccacagaa ccttcaaccc agtgggtctg ggatatggct
                                                                     2220
gcccaggaga cagaccactt gccacgctgt tgtaaaaacc caagtccctg tcatttgaac
                                                                     2280
ctggatccag cactggtgaa ctgagctggg caggaaggga gaacttgaaa cagattcagg
                                                                     2340
ccagcccagc caggccaaca gcacctcccc gctgggaaga gaagagggcc cagcccagag
                                                                    2400
ccacctggat ctatccctgc ggcctccaca cctgaacttg cctaactaac tggcagggga
                                                                    2460
gacaggagcc tagcggagcc cagcctggga gcccagaggg tggcaagaac agtgggcgtt
                                                                    2520
qqqaqcctag ctcctgccac atggagcccc ctctgccggt cgggcagcca gcagaggggg
                                                                    2580
agtagccaag ctgcttgtcc tgggcctgcc cctgtgtatt caccaccaat aaatcagacc
                                                                    2640
atgaaaccaa aaaaaaaa
                                                                    2658
```

```
<211> 843
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(844)
     <223> n = a,t,c or g
    <220>
    <221> misc feature
    <222> (71)...(489)
     <223> similar to gi2088669 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3608
gaatccttat tatattccac attctaagtt aagtgcttta catggaatat ctcatttaac
                                                                       60
ccacaggata atcaagggcg ggggacttct caagtacagc aaccttcttg tgcgggactt
                                                                      120
caggcccaca gaccaggaag aaatcaaaac tctagagcgc tacatgtgct ccaggttctt
                                                                      180
catcgacttc ccggacatcc ttgaacagca gaggaagttg gagacttacc ttcaaaacca
                                                                      240
cttcgctgaa gaagagaaa gcaagtacga ctacctcatg atccttcgca gggtggtgaa
                                                                      300
cgagagcacc gtgtgtctca tggggcatga acgcaggcag actctgaacc tcatctcct
                                                                      360
cctggccttg cgtgtgctgg cggaacaaaa catcatcccc aqtqccacca acqtcacctg
                                                                      420
ttactaccag ccggcccctt acgtcagtga tggcaacttc agcaactact acgttgccca
                                                                      480
tectecagte acetacagee ageettacee tacetggetg ecetgtaact aacettgaga
                                                                      540
cctgagggtt tccacagtgg gaaccccaat agggctaggg ctctcaggta ggggagcctc
                                                                      600
cttctagatg taggcatttg gcttttaaag gggaactcag ctctgattct gcnnnnnnn
                                                                      660
nnnnnnnct ttggggcccc catggaaagg ggtcaacggg gaatcaggac ccaccctaa
                                                                      720
agggccccgt tttacaggcc cttgtggaaa acccctccgg gaggcgggcc ctatccactt
                                                                      780
ttttccaaaa taaacactac cttgtttggc cccaaactta agcagggggg ggtggggctt
                                                                      840
tqq
                                                                      843
```

<210> 3609

<210> 3608

```
<211> 3965
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3966)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(3504)
<223> similar to gi5689573 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3609 gacgggctgg ggaggtggtg ccaggctggt tgctagctgc cqccqctqct caccccqqcc 60 gtccggccgc ttcattgtca ccgggcctcg gggcagtgtt gggggtggcg qqqcqccaqq 120 tcgccgaccc gaggtttcgg cgcgactggt tccgcatccc ctccccgccg gccgaatctg 180 caggeceege gegecaggea ggettegegg etgegeece ggecegegea ggacetgeet 240 tgtccaccat gaaaggcacc cgggccatcg gcagcgtccc ggagcgcagc ccagcaggtg 300 tggacctgag tctgacaggt ctccctccgc ctgtgtcccg gcgtcctgqc agtgccqcca 360 ccaccaagcc catcgtccgc tctgtctccg tggtcacagg cagcgagcag aagaggaagg 420 tgctggaggc cacagggcct gggggctccc aggccatcaa caaccttaga agatccaaca 480 gcaccacgca ggtcagccag cctcggagcg gctcccccag gccaacggag cccacagact 540 tcctgatgct cttcgagggc agccccagtg ggaaaaagag gcctgccagc ctgagcacag 600 ccccagcga gaagggagcc acctggaacg tcctggatga ccagccccgg ggcttcacct 660 tgccatccaa tgcccggagt tccagtgccc ttgactcacc agcgggcccg cggaggaaag 720 aatgcaccgt ggccctggcc cccaacttca ctgctaacaa caggagcaac aagggagcag 780 tgggcaactg cgtcaccacc atggtgcaca accgctacac cccctcggag agggcgcctc 840 cgctcaagag ctccaaccag actgccccct ccctcaacaa catcatcaag gcagccacct 900 gtgagggcag tgagagcagc ggctttggga agctgccgaa gaatgtctcc agtqccaccc 960 actcagcccg gaacaatact gggggcagca cgggcttgcc caggcggaag gaggtgacgg 1020 aggaggaggc tgagaggttt atccaccagg tgaaccaggc cgctgtcacc atccagcgct 1080 ggtaccggca ccaggtgcag cggcgcggag caggagctgc ccgcctggag cacttgcttc 1140 aggccaagcg ggaggagcag cggcagcggt caggcgaggg gaccctcttq gacctqcacc 1200 agcagaaaga ggcagccagg aggaaggccc gggaggagaa ggcacgccaa gccaggcgag 1260 cagccattca ggagctgcaa cagaaacgag ccctgagagc ccagaaggcg agcactgccg 1320 agcgtgggcc acctgagaat cccagggaga ccagagtgcc aggaatgcgg cagcctgctc 1380 aggagetgte ceceaegeea ggeggeaetg cecaeeagge ceteaaggee aacaatgetg 1440 gtggtggcct ccctgctgca ggccccggag accgctgcct gcccacctcc gactcatccc 1500 cagaaccaca gcagcctcca gaggacagga cgcaggacgt tacttgccca ggatgcagct 1560 ggggacaacc tggagatgat ggccccgagc agggggagcg ccaagtccag ggggccactg 1620 1680 aggacccatc acaggggcag atacgcctgg gccagcgagg tgaccacgga ggatgacqcc 1740 agctctctga cagctgacaa cttggagaaa tttggaaaac tcagtgcgtt ccccgaacct 1800 cctgaggatg ggacgctgct atcggaggcc aagctacaaa gcatcatgag cttcttggac 1860 gagatggaga agtctgggca ggaccagctg gactcccagc aggaggggtg ggtgccggag 1920 gcggggccgg ggcccctgga gctggggtcc gaggtgagca cgtctgtgat gcggctgaag 1980 ctggaggtgg aggagaagaa gcaggccatg ctgctgctgc agagagcgct qqcqcaqcaq 2040 cgagacctca cggcccggcg ggtcaaggag acagagaagg cactgagccg gcagctgcaa 2100 eggeagaagg aggeeetaeg aggeeaecat eeageggeae ttggeettea ttgaceaget 2160 gattgaggac aagaaggtcc tgagtgaaaa gtgcgaggct gtggtggccg agctgaagca 2220 ggaggaccag agatgcaccg agcgtgtggc ccaggcacag gcgcagcacg agctggagat 2280

```
taaaaaaactc aaagaattaa tgagcgccac cgagaaagcc cgccgggaga agtggatcag
                                                                     2340
tgagaaaacc aagaagatca aggaggtcac tgtccgaggt ctggagcccg agatccagaa
                                                                     2400
gctgattgca aggcacaagc aggaagtgcg gaggctcaag agcctgcacg aggcggagct
                                                                     2460
gctgcagtcg gatgagcggg cctcgcagcg ctgcctgcgc caggccqaqq aqctqcqqqa
                                                                     2520
gcagctggag cgggagaagg aggcgctggg ccagcaggag cgcgaacgtg ctcggcagcg
                                                                     2580
gttccagcag cacctggagc aggagcagtg ggcgctgcag cagcaacggc agcggctgta
                                                                    2640
cagtgaggtg gctgaggaga gggagcggct gggccagcag gcagccaggc agcgggcgga
                                                                    2700
gctggaagag ctgaggcagc agctggagga gagcagctct gcactgaccc gagccctgag
                                                                    2760
ggctgagttt gagaagggca gggaggagca ggagcgccgg caccagatgg agctgaatac
                                                                    2820
cctgaagcag cagctggagc tggagaggca ggcgtgggag gccggccgca ccaggaagga
                                                                    2880
ggaggcgtgg ctgctgaacc gggaacagga gctgagggaa gaaatccgga aaggccggga
                                                                    2940
caaggagatt gagctggtca ttcaccggct ggaggccgac atggcgctgg ccaaggagga
                                                                     3000
gagtgagaag gctgccgaga gccgcatcaa gcgcttacgg gacaagtacg aggccgagct
                                                                    3060
ctccgagctg gagcagtcgg agcggaagct tcaggagcgg tgctcggagc tgaaqggcca
                                                                    3120
gcttggggag gccgagggcg agaatctgcg tctgcagggc cttgtgcggc agaaggaqcq
                                                                     3180
ggcgctggag gatgcgcagg cggtgaacga gcagctttct agcgagcgca gcaacctggc
                                                                     3240
ccaggtgatc cgccaggagt tcgaggaccg ggctggcagc ctctgaggag gagacgcgqc
                                                                     3300
aggccaaggc cgagctggcc acgctgcagg cccgccagca gctggagctg gaggaggtgc
                                                                     3360
accggagggt gaagacagcc ctcgcgagga aggaggaggc cqtgagcaqc ctccqqacac
                                                                    3420
aacataaggg ttcgggtgaa gcgggccgac cacctggagg agctgctgaa gcagcacagg
                                                                    3480
aggcccacgc caagtaccaa gtgtccaggg atgccgggaa cactgtttaa gaacggaagg
                                                                    3540
caaaggacaa aggctggacg tgggcccaga ggcccacagg gacgcccacc tgcccccac
                                                                    3600
agaggctggt ggttgagatg cccacggcta agcacctgtg gctgcatttt aacagtaaag
                                                                    3660
gaggccgttg ttttcagcaa aaaaaaaaa aagggggcgc ccttttaaaa gaatcaattt
                                                                    3720
ttattcccgg gggcgggaaa ggaaaaattt tttttttggg gccccaaaat taaattccgg
                                                                    3780
ggccggtttt ttaaaacggt gggggggaa aaacccgggg gttccccaat ttaaaccgtt
                                                                    3840
tgggaaaaan gnnnnnnnn nngnnnnaan nangnntnct tnntgagata tttttttgtc
                                                                    3900
ttgcctacac gggtggggtt ttgattttag ttaaaaccat tggggggttt ggaaaatact
                                                                    3960
caaag
                                                                    3965
```

```
<210> 3610
<211> 1539
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(683)
<223> similar to gi971251 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3610
cccacgcgtc cgcaaggcca gggacctgtg accatggaag cagagagaag caaggccaca
                                                                       60
gccgtggccc tgggcagttt cccggcaggt ggcccggccg agctgtcgct gagactcggg
                                                                      120
gagccattga ccatcgtctc tgaggatgga gactggtgga cggtgctgtc tgaagtctca
                                                                      180
ggcagagagt ataacatccc cagcgtccac gtggccaaag tctcccatgg gtggctgtat
                                                                      240
gagggcctga gcagggagaa agcagaggaa ctgctgttgt tacctgggaa ccctggaggg
                                                                      300
gccttcctca tccgggagag ccagaccagg agaggctctt actctctgtc agtccgcctc
                                                                      360
ageegeeetg cateetggga eeggateaga caetaeagga teeactgeet tgacaatgge
                                                                      420
tggctgtaca tctcaccgcg cctcaccttc ccctcactcc aggccctggg ggaccattac
                                                                      480
```

```
tctgagggct ggcccgctcc ctggcaagga tataccccta cctgtgactg tgcagaggac
                                                                      540
accactcaac tggaaagagc tggacagctc cctcctgttt tctgaagctg ccacagggga
                                                                      600
ggagtctctt ctcagtgagg gtctccggga gtccctcagc ttctacatca gcctgaatga
                                                                      660
cgaggctgtc tctttggatg atgcctaggc ccaaaggaga qqccaaaaqq qaaaccaaqq
                                                                      720
ctgcacacct agaaccccaa ttcagcctcc tgggcacccc agaggcaagg ctgtgcactc
                                                                      780
aggqagggag ggtgggacac agaggtgcat ctagggtccc acctgtaccc ttgctctttc
                                                                      840
ctctcttagc ccttagaagt cacctacttc cttccagtgc catgatccca cctgcgacct
                                                                      900
ctagtgcgag tgcagagaag gtgggaccag ggccagggtt ccaaaaagag aataagcctc
                                                                      960
ctggggggtc tgacctagtt agttcttgag tttggggttt ccagtaccat ctggatgccc
                                                                     1020
tgcctgttga gccccattct acatccccac cattaaccag gccccaccca caaggtagaa
                                                                     1080
acaaccccta gagtcaacga gaaagtcatt ttcagaaaat ctacaagtct cgttgagacc
                                                                     1140
accaccatac ctcagaaggt aggactgtgg cctagaaggg aaaggaaagc tgagatgatg
                                                                     1200
tcttaccgta gcagcagatc ttggatggtc caggctctat gtgacctcca gagcaaaqaq
                                                                     1260
aaagacttcg gacagtctag gtcctcaaat gtcccccatt gaggacaaca gccccagctc
                                                                     1320
tttttctttt ttttgagacg gagtcttgcc ctgttgccca tgctggagtg caatggcacg
                                                                     1380
atttcagete actgeaacet ceateteetg gatteaaaca atteteetge eteageetee
                                                                     1440
agaatagctg ggattacagg cgtacaccac catgcctggc taatttttt gtattttag
                                                                     1500
tagacatggg gtttcaccac attggccagg ctggtgtcg
                                                                    1539
```

```
<210> 3611
<211> 2972
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2973)...(1101)
<223> similar to gi4835895 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3611 ctctgctgaa gtttctgatc aaaaggcaaa gagaggcatt gctcacattt tctatgtata 60 ctttgcaaca tatcttttaa actgacccaa actggaagaa caaacatata tacccgttac 120 tgaataccag aaatattgaa ttaaatgtca aactcagtct gatttgcttt aaacaagtga 180 taccatatac tatctttaga aatttcaaga aaacatgaac ttatcttgac cattttccag 240 aaagtagtct ataccaacaa gatttgtaca gatgtttctg tttggagaca ggcagaacca 300 atttagggct taccaaattg tgttcataac aaactgaaaa aaatctctag tacacagtac 360 acaactaaaa aatataatag aaatataaag atatctaggg gaagaaataa agcttttcac 420 tttctccatc agaaccaagg ttcttcatgg gagtaagact atagaaaagg caaaatcaca 480 ggttactgac agccctcagt tattaagaga cacatgacaa catgaatcat tatagaaatc 540 agcagcaatg aattctatga ttatacaaag caaaaaagtc aaaaaattct ggacacagat 600 ttgactgtag gcctgaaaaa agaacctcat ccagatattt ggtgcacaga aagcacatgc 660 cccatgtgca ttcaactttt gtgcttttct tttgtgcaca aaacctgata caacagagga 720 tcttaggccg gaccatagta aattaaaaat tctgaaaaag tatccaaaaa ttaaagcatc 780 aattcctagt tgtgattcaa agttgatttt tttttctctt ctaggagcaa gcaaataaaa 840 atatagccat atacatgtaa ttttacatgt atttatagtt atatgctgag caaggagatc 900 tagcaagaga tagctagtgt tagatgttca gctttgctat tgcaatattt tgtcattttt 960 gtacacaagg ccaaggtett gggeeacaga caaggetata gateetaegt tecagettag 1020 agcattcagc ttttttttt cttttttct cccacatgga atgtcacaca ggccttgctt 1080 cagtcactgt taatactaga acaaaatagg ctttcctgca gttttttctt ggacgtaaga 1140

```
agtaaaacgt tttagaaatt taggatactc tcgctttgcc actgccctta acactgaggg
                                                                     1200
tgggtgccca tcctccaggg ttcacattag ctacatatgt aatcttgcat agaatgttgt
                                                                     1260
ccctgctaat ttcctggttt cccctctggg gggcttacca aggtttgaca aatcatagca
                                                                     1320
acatttattt tggcacggac acatcggttg tttagaggag cactgtcatg atccacagaa
                                                                     1380
aaattacaaa ctatccaagt ttcagggtca ttttcagtca aggctggtat ctttcgaatg
                                                                     1440
acagaaagat ataatacgtc tcgctgagaa gcaggccaca ccctcttgtg tgtttgataa
                                                                     1500
atgatgattg cattatcagc taatgtttcc accacatgaa agttttctat agttgtttcc
                                                                     1560
cagtcattgc gaacgtcaac attccagaaa taattgcaga cttcatqtcc tgtqacqcct
                                                                     1620
ttaactgcat gggtagcttt taaaggatcc agaacaatcc cattttcttc tacttctctt
                                                                     1680
ctgtatacct tcatttctcc ttcttctaca accaactgcc aattggcatc tccgcctaca
                                                                     1740
tectgtaatg agtaagteat gtggttetge accatetett caacetggga getgaatetg
                                                                     1800
tgaacatcat cagaggccct ggctagatca atggaagaca tggaggaaga gcgactatag
                                                                     1860
ggcttttgga caaatctatg tgtccccaca gaagaaaagg catctccaga gggcaaggat
                                                                     1920
gtaggccaat gtaatctcac cttttcactc tgtgactgtt cttctatttt atcttgtctg
                                                                     1980
tcaagagcag cttcaacagc atcaaagaac tcttcttcat taatcagact gttagggcct
                                                                     2040
tetteataat etggteetee aaagtgggat tttttettaa gttetgteat tgeattttta
                                                                     2100
tatgcttcct ctgttcttct tttcttctca gtttccttat ccagtctctt ctgccagctg
                                                                     2160
tcctcacgtt taaccattag ttcaatacaa tgagaaagtg ttgcaaggat tccagcagta
                                                                     2220
gttgctttaa aagttatcgc ttccccttta aagtctatac cattaattcc ttttggtgtc
                                                                     2280
acatgtggaa ataacttttc tttattgccg ttggtactat gcaagaagtc accatcagaa
                                                                     2340
egegttgtag gaaagteate tteateatet tetaceaett tateeetttg aagtteatee
                                                                     2400
ttagagacag catcagcaca ggcatcaaag tacttctgta gcgtgtcaac ttgtctacat
                                                                     2460
aagatgtctc taaatgtttc catttcagcc aacttctcac gtaaactgtg gcctttcttg
                                                                     2520
aatgaagagg tggatgttgc agagtagcca cttgctccag acaccaggga caccattgag
                                                                     2580
ccatgtcgac gcaagctgga ttcagatcca tatccagatt cagtcttgtg ctgttcaatg
                                                                     2640
gcatctatcc attgctgtct atgatctgga tcctgagcac gaagatacca aacactatca
                                                                     2700
tttacactaa tatcaaatcg acattcatca aaatcgtgag gtgtgatgac agccttgcta
                                                                     2760
agacagatgg atcctctgca gccatactct gtttcatctt cagatttgta gtaactcaga
                                                                     2820
gcattatttt tcaaaactac ccaacgatcc tgccacccat gaatgtagtt tgtccactta
                                                                     2880
ctgaggaccc cgcagcgctc cacaggcggc ccagactccg tctctggatc ctcctccgag
                                                                     2940
cccgacgagt tccagctctg attatccgac at
                                                                    2972
```

```
<210> 3612
<211> 2408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2409)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2410)...(784)
<223> similar to gi5305448 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3612
ttttttttt ttcgagataa acctttttat ttatttatgc ttctccattt tgtttaaaac 60

```
aacaacaaca accaccttaa tgtaactgac agcccttccc cctcaccctg cctcgggctg
                                                                      120
ggggtagtta atggggaaat ggcccccagg gtggggctga ccagaagagc ccctcaagga
                                                                      180
gctcatggag cccaaatccc ctgccctggg gaggggacct gtagtgtgtg acgggagcct
                                                                      240
etceegagee tetgettgta ceateaaaga tgeeettgge caacaagggt caggaageat
                                                                      300
gggggaggga tttcggcctc ctctgtccct acccagccca atctcacgag cagggctggg
                                                                      360
gggtttaaaa agggtggagc gggtggggtt ggctcacacg aaggagtact ggttgttaaa
                                                                      420
tgqcccctgg ggtggccccc ttcctctcca tcacccccct agtggtgact gctgcagctg
                                                                      480
caccaattgg gggcaccccc gcgtccccac caggacccag gcgcccttgg gcctcttgag
                                                                      540
cctggggcct atggccctct cccaattcac ccaccgggac cagctaaacc acggggacca
                                                                      600
geetetteeg ggaeeeetee accegeeege tttetettte tettgeetet etttggetge
                                                                      660
tgcggctgcc tnttgcccgc cacttcctgg cgcccctcga cgcctctttc ttccccaqqc
                                                                      720
tgtgggggat ctgtccatga agggggttca gggggctggg gtgggtcatg ggaggtggtc
                                                                     780
ggttacacag tcactcgctc cgaagggcat gagggtgcag gaggcattcg gggtggcatc
                                                                      840
catctccctc gcacaccccc gcatggctcc cagcctgctc ccggcctcac ttcttgqqtq
                                                                      900
cacgggcacc tectecett cagacetget etgeteacce tgetgteget gggaggatgg
                                                                      960
gacatagctg acaaggacaa catcactgga gcctcccgac tccaaaggga tggggtgcac
                                                                     1020
ccggaagtgc tcgagcatat cgaaaatgga ctggaaccac aggtgctgga cccggcactg
                                                                     1080
accetecteg tteagegaca aacgeaggtg ettggeettg eeetggaagt tgaaggtgag
                                                                    1140
gacgtattca ccccgccttg tctcactctg gcgcaccagg aagacaccgt gggagccagt
                                                                    1200
gccgccagtc agcaccaact gtgcagcctt gagccgagag agcatcccgt ggaaccaagg
                                                                    1260
ataccetqaq aqqqqetqgt ecceetcace geeetctgge teceeectgg aacaggaagg
                                                                    1320
accetgtggc tgtttccgga gtgtccaagg gagggtaggg ggctgagagg ggatgaactg
                                                                    1380
tccctgctgg gggtccctct tcaatgggga tgcgggggg caactctggg ggaagcagtt
                                                                    1440
ccatcgagtc aaaatgggag gcggcaatgg aggcagagct gggggagatg gatgccgagg
                                                                    1500
ggcggtctga gaggccccca tatgccccct gcgacaggcg gtcattgctc tcgctgggtc
                                                                    1560
caagcagcag gtcctggctg ggtagactct ccgagtgatt caggcaggac aqctccaggc
                                                                    1620
tqtctgtgtt ctcccttgta aggaatgagg tcccaggggc cagagggagg gtcatggggc
                                                                    1680
ggggactggt agcagggcag ggtcctgggc tcaggcattc ttggatqtca qacacccagg
                                                                    1740
ccttcacatg ctgggcatcc actgtctcca tgatatactc ggatggacct tccaccttaa
                                                                    1800
ccacaaacgt gttctcccgg tcaggcatct ccagggctgt ggttgtccgg acgtctgtga
                                                                    1860
tagaagagca ggggatgctg agtcggggcc gagaggcctt gggtggtaca aagaactcca
                                                                    1920
ggcgacttcc tcctcctt tctccttcac ttcgaagcag caggcgacac ttctgccact
                                                                    1980
gaggetgeec tecteceet gaaggaggee cagecacee tecteceegg eccaeteegg
                                                                    2040
ctgggtcagg ggctgcctcc tcagccccca tgaaactcag cagctcttcc ctctgcacca
                                                                    2100
tecetgetee atcetteaag gegeeecte eeegactgag teteageete teaaaacggt
                                                                    2160
gagtccatct ttccccaggg gacgttccat cactgaccag tcccctacca acggtcccag
                                                                    2220
ccccgccaga ggagttggag ttgctgtttc cacctaagac tggggggcct gacgaggtct
                                                                    2280
ccaggggccc agcggaggag ggagggtcaa cggtcccccg ccactgcaqq atqccacqqa
                                                                    2340
ctgagcctcg gacagagcga cccactgaac gcagggaaaa gcgcttcttg agcttcggct
                                                                    2400
tggaggag
                                                                    2408
```

```
<210> 3613

<211> 2204

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1803)...(980)

<223> similar to gi4218005 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3613
ttggggaacc cccagggttt tcccatccc ccggtgtaaa accgcggccc aggaaatgga
                                                                       60
ttttgggggc cccataaaaa aacttttgcg ttgccagccc ccggacgtta acctggatcc
                                                                      120
tttaaaacgg ccccccttt ttttttttt tctttaacaa aatttttatt taataaatgg
                                                                      180
ttaaaaatcgc agtgccaaaa atacattgac atttagcaat ttcactgaaa ggaagaaact
                                                                      240
acagaatgca cggtttcaga aagctatttt aagttattta caaataaagt atctaaaact
                                                                      300
caaaaacagg ctctgtatgc tatatctagt ttatcccttc ccgaacaaaa tttctgttat
                                                                      360
ttgggcaaat tcttaaacca tggtttaaac cgtaatggtt acaaaccaca aacacatcca
                                                                      420
tccagagact gaaaccgttt ctatccggtc agtggcaaaa ctgttgaaag ggcaatagtt
                                                                      480
gaagctgttg ggttttatat agtgtgaact ctgataaata ttcctaccag gactaaaaca
                                                                      540
cagcacgctt tgcgggcatg gctgactcac aaaggttgta acaaacaaqa actactcttc
                                                                      600
actegacace atggeteaga ggeeacegag aageaegagt gaetgaeage teetetgett
                                                                      660
acaaacgaat gaaacccaaa gtggatgtcg ttctcacagc actgaaagtg cttcaggact
                                                                      720
cacactgate caatactaae tttetteeet attttacaca tattttteta etgteeagtg
                                                                      780
gaaatcattt tctgttttgg ctaaacaaca aatactagtt tataacagga atggtaaaat
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ctgtgagaat tctgctcaat ttaatacaag atcactactt tctttagaat ggtttctgcg
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tgtttctacg tcaccctctg tatttttagc ttccagtttc ctggtaagga ataagttctc
                                                                      960
cttcccagtc acactcgggg tcatttacac gtttctggga tgcccttgct cgtccatgga
                                                                     1020
ggccaggtgc gtgcagtgac tcactctgcc tcttccctct tctcaggacc agtccccgaa
                                                                     1080
ccttctgcct tgcagatcct cctgtttccg ccacactctc gcgctcggaa gcgagctcct
                                                                     1140
ggatcataca gctgcaaggc tggccggtcc ttgtttgcca gtcgctcttt tctgggtgct
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ggactgtcgt cacacctctg cgctcttccc agtctctcca tggcctcccc cggagccccg
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tecteactee ttetggaaag eegtteagge tegtggtgag etetgtgeet eetgeegtea
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tccacatggt atctttgtgc ttcagattct tgttcttgag atctctccac atccctgtgc
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                                                                     1560
tecteteete tttettttgg tttetetgtg gttgqtteet etecetttte tqqtttetta
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taggtttcta aaaacttctt atattctgga tctttgctgt caaggaagat atatccatca
                                                                     1980
aaacgatctc taaaaagaag gatgtcatca ggattcctaa aattaatgta tgctcttgag
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tagagatgag gataaagact caggtcggcg gcgaagaact cgaagtagtc qtqtqctqqc
                                                                     2100
agcgggcgca gctgctcctc cagctgctcc ttggtgaggc ccggaggcag gcggcggatg
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accacctgcg gggagcgcgc ggccgttccc accggggcac gaaa
                                                                     2204
```

```
<210> 3614
<211> 823
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (777)...(278)
<223> similar to gi5019453 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3614
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cagatcacaa agegggtete eetgtgetge tteettetgt gttttetagt eteteecea
                                                                      120
ggggctgccc agggccctca ggaactgagt gtgggcaaga cactgctggg ccaqaqqqca
                                                                      180
cgacgcccac gtgggcccgt attgcccagg ccatttggca gtgcagagcc cccccagcct
                                                                      240
ccagcaggag ccccctggca tgagctctcc cctcaggggt cctgagcaac gtccctgcca
                                                                      300
gggctggtgg gtggcagcgg gggggcagac acctcgctga ggtcctgcag cagagcttgc
                                                                      360
agccgctgca ggctggggtg cacgttttcc tccagccact cctccacggc atccgggtag
                                                                      420
aaagccagct gcagggcagc ctccagctcc tgcacgaggg tgctccactg tgccaggagg
                                                                      480
ctgagcgctg cgggctggat gtgctgaacc atgaccgggt ggatgagctt ccgctggcgg
                                                                      540
tggtaggggc tgaaccagcc agtgacatac ctgttgccct ccagcagcgc atccacagag
                                                                      600
ctgcgcagat ggaggctgac ttgtgtgaca agggcaagga tgttgctgcc agggaaggag
                                                                      660
ccggccccct ccctgcggag agccctgctg agaacagctg tctccacggg cgggggaagg
                                                                      720
ggaggggaag aaggggacag ggagggctgc agggtgcttg cctaacaggg tccgttttt
                                                                      780
ccaggctgga aatcccgaga aggttctcca ctttcgcttt aac
                                                                      823
```

```
<210> 3615
<211> 4033
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1370)
<223> similar to gi1945155 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3615 accgacggcg cggcagtggc cggcaacccg ggctcggatt acttcccagg agggactgct 60 cctggggccc caggacccgg aggcccgtcc gggaccagta gcagcggctc caaagcctcg 120 gggccgccca accetecage ccagggggae ggcaccagee tetececcaa etacaccetg 180 gaatccacgt cggggaatga cggcaagccg gtctccgggg gcggcggccg gggacggggt 240 cgcagaaaaa gggacagtgg tcacgtgagc cctggcacct tctttgacaa gtactcggcg 300 geteeggaca gegggggege acetggggtg ageecaggge ageageaage gteaggegea 360 gccgtcgggg gaagctccgc aggcgagacg cgcggggcac cgacgcccca cgaaaaggcg 420 ctcacgtcgc catcctgggg gaagggggct gagttgctcc tggggggatca gccggacctc 480 attgggtccc tggacggcgg ggccaagtcg gacagtagtt cgccaaacgt gggtgagttc 540 geeteggaeg aggtgageae gagetaegee aatgaggaeg aggtgtegte eagetetgae 600 aacccccagg cactagttaa agcgagcagg agtcccctgg tgaccggctc gcccaaactc 660 ceteccegtg gggtaggege eggggaacae ggaeegaagg egeeeeegee egeeetegge 720 ctgggcatca tgtctaactc tacctcgacc cctgacagct acggcggcgg tgggggcccg 780 ggccatccgg gcactccggg cctggagcag gtccgcaccc cgacgagcag cagcggcgcc 840 900 eegecaceeg aegagateea eeeeetggag atcetteagg egeagateea getacagagg cagcagttca gcatctccga ggaccagcct ctggggctga agggtggcaa gaagggtgag 960 tgcgccgtcg gggcctcagg ggcgcagaat ggcgacagcg agctgggcag ctgctgctcc 1020 gaggcggtca agagcgccat gagcaccatt gacctggact cgctgatggc agagcacagc 1080 getgeetggt acatgeeege tgacaaggee etggtggaca gegeggaega egacaagaeg 1140 ttggcgccct gggagaaggc caaaccccag aaccccaaca gcaaagaagc ccacgacctc 1200

```
cetgeaaaca aggeeteage ateceageet ggeageeaet tgeagtgeet gtetgteeae
                                                                   1260
tgcacagacg acgtgggtga cgccaaggct cgagcctccg tgcccacctg gcggtccctg
                                                                   1320
cattetgaca tetecaacag atttgggaca ttegtggetg cectaacttg aatgacaaga
                                                                   1380
aagatcccct cctctaccag gcccttcctc tccccctgtc tgtttccttc cccctcaacc
                                                                   1440
ttaccccacc cctctgttaa tttgaaaggg ccactattgc tgagtggatg agttttttt
                                                                   1500
ttttcctcta ggttggtacc tgcttagtgg catatggacc ggaaagggtt aatttaaagg
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gggggaacct caaaagtttt tttaaaaaag aaacttgtct gccacagtat gttaccagtg
                                                                   1620
ttaaccette tgccagttag caaacttttg cettaageet tttteeteta ggataeteee
                                                                   1680
1740
ttcatgctgc tgtatgtcca agtattgtta atttcataat aagacaagag ttgcttctt
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ttttattctt tttccttttc ttaccccctc cccttttatt ttctttttgc tttgttcact
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gcttattaaa atggaaatcc tggagaatag tagttctgga atattgccgg gtgaaagtcc
                                                                   1920
aattgtcatc acaatgttat atattgacac cccaqtgtca tcagtcaggc aggagccaaa
                                                                   1980
caatgaatgc ccctcttagg tattccgcct gggattttgt tttgtctgtt ccctaagaaa
                                                                   2040
atatattttc attcctgcaa acacagtgct cagccttcag ttcccttcca cttgagttct
                                                                   2100
etetteteet getggaagee geeestetet gegatggaeg tgaggaegtg teeagetetg
                                                                   2160
ctctgtggga aggagttgga atgttcgaca gcagtgtttt ctctcctttt ctgggcctcc
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tegeaaatge ecaggeeetg catttteacg etgtgetaaa geageetttg gtetgeatgg
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gggatggtgt gctcccagcc tgcagtcttt gggagcaagg ctgcttgccc gtggccttgg
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gtgctggagt tggaggggc tattctcagc cctttccctt ttctgaaagc tgttcctggc
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egggeatece agggaagaag gaggggaetg egtgtatete etceaeetet eccattecat
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ccccagtcca gcctgggcaa ccccaccct gggagggatg aggcaccctc ttgctcagcc
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tgctcagcct tctctgagcc tttgcaggga tctgcagact cctgagggct agaggacaga
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gaaagagaat agaatgaaat gactttgatt cctgcgcctt ttagttttga actctggaat
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                                                                   2700
gtcccaagca tctcacaaag gaataactgc tctgagcaga gatgagtggt ggttggcagg
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ggcaggcaac tttgggtgct gctgatgcct gcaaaagcca tttatggctt gtggtgggg
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gcacataaat tccccggtgg gttagacagg aagtaactga tatcacttca cccaaatata
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taaccgtgat ggttatctat ttaatttcag tttttgttaa cgagcgtgtc ttactaaaac
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gctccacttt gagctccccc acccctcca ggtcctcaga gtttgcagat ctgggctttc
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taaagcaagt gacctgaagg ctctgggctc accatacaac acccacgttg tttatttcaa
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agaacttttc agcgaaggga gaggagcttt cagaaaaacc tcactctttc ccctccttc
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teceetettt cettetgeeg gteettttgg etggggtetg agtetgeggt tetegeetgg
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gcagtcttga cgaggagcaa accccgcctt cagagggcag acaaagcagg tggcatgaat
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tgatcagcga gaaaggtgtg agccgaggca gttcctgcgt tctgctacaa aaggaatgga
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aagggaaggg aattteeece caecatggge tgtgggagag ttgaeegtat tetgggeaag
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actccatgac ccctctgatt ctgcagtgta cagctgtttg agagcctcat cattttactt
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aaagaataaa agtaaatgaa aaacacaccc tacacactag actccgaaca ctggtaatca
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gtactgcata gcaaactctt tgggaaagaa aacgaaaatg ttattgcaca tgtaaaatat
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gaaaacttaa ctctgctgtg tgttaggcaa tcctgtaatc ttttttgact cttaaaagaa
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tttttttctt tctttttaa aaaaatatgt aaagtgcagt cttctgtatt cctgcatatt
                                                                   3960
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gaaaaaaaa aaa
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```

<210> 3616

<211> 1203

<212> DNA

<213> Homo sapiens

```
<220>
     <221> misc feature
     <222> (9)...(211)
     <223> similar to gi4680669 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
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tgaactggct gggcttcgcc ctctgcctct cgggaatatc cctccacgtt gccctcaaaq
                                                                    180
ccctgcattc cagaggtaac ccagagtccc ttccagaagc ctctgttttc tgttcttctc
                                                                    240
cetgtgacte ttagtgatte tgatgeagga agtgtgeeeg gtggetetge tgeegteact
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cctctaggaa gatgtggggg tcatctccag agtgggtggg tggggcctgg gtgactcagc
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acacatgcaa atcagagcaa accaagaaaa ccacgactgg gcctgtaact gtggtctctc
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tctatcccaa ggtgatggtg gccccaaggc cttgaagggg ctgggctcca gccccgacct
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ggagctgctg ctccggagca gccagcggga ggaaggtgac aatgaggagg aggagtactt
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tgtggcccag gggcagcagt gaccagccag ggcaaatggc ttagaagcag gccactcccc
                                                                    600
agectgetge cageacteae tgtgeteaag eegecaggge teatcatggt agetgggage
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tgtggacggg agtcaccagg tggtggggcc aagccaggga ctcatgactt ttgcccctcc
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cttcagagcc tggtcacaca aggggcgagc accaggccag cctgggactg gccagagctg
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                                                                    900
gtttggactg ggttttggac ctccaggggc tggagcttca tcacctgggc agtgtctttt
                                                                    960
ctcagagage aggtttcttt atagtttgga aataaatggt tcacggtcca ctggccgcct
                                                                   1020
1080
ttccctgcct ggagccttct tcaaatgtct ggtcttaagc caggcctcct tcattttctc
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                                                                   1200
ata
                                                                   1203
     <210> 3617
     <211> 4826
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (4827)...(2413)
     <223> similar to gi5689489 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3617
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                                                                    120
aaaacaagtt acatatggat gatggagtct acccgcacaa acatccctaa aactcattgg
                                                                    180
ttctcatctt tgcaggggga gggagagaaa gcaaaaaata gcagaaaccc ccaactcttg
                                                                    240
aaaagcagag atttgttcaa tgaaaaatga gggagttgaa agaaaaatga ctcgacacat
                                                                    300
```

```
atettgatta ttgeaaacee aetetgggge tggggeteet ggggagaggg aggtetagte
                                                                 360
cccttagtga aggccagccg aggttaacac tgggcacgat ggctgggagc aaggtgaggc
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cagggggagg ggtgaggcaa gggtcccttc cctggtcttc tcgaacaccc ccacttcttt
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tatgggaagg ggacagaatg gagacagccc tttggaggct gtacatgtaa cttgaatcag
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ccgtctctac aagctacgca tttcctcatg tgaaaaataa attatttcct cagttgcaca
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accttcacat ttcaacggtt aaatgtcttt tctcacaacg aggaaaaaaa tagagaagac
                                                                2040
2100
2160
gaaatcctga aaggggcgtt tgttaaaatg agagagacgt gggctgaacg acagagaagc
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cctttcccgc ggagggccg gagccagggg ctccaggggg tagtgtgggg cgccaggccc
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2340
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geoeteactg egggeacage eegteaegtg etegeggatg ecategteee gtttettett
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ggtcaccgtc cgggggtcat gggtgctggg gaagacgggg gtctgtggct ggcccqqcaq
                                                                3660
gagcaggagt tecettecaa gggeggeeee tgetggtggt eggaeeaagg geeeateeaa
                                                                3720
```

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3780
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cccgtctcca ggagcaccgg ggaggccagg ggcccggagc gttcatcqcq tcqqccaqtq
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                                                                 4200
gccaggctgc cacagaggcc tggagtatgc ggggggtggt cctcggcaag gggctccgga
                                                                 4260
gggacagatg ggtgtgaggc atctgtggtc tcaggctccg gcggtgggct gggtggccgg
                                                                 4320
ggtggtcgtg ggggcggcaa tggtggttgc agcggcaagg ggagcatcat agggggctcc
                                                                 4380
ggctccactt ccaggtcatg ttctggagct cgctcagggg acaatggggg tcgagcctcc
                                                                 4440
acctccttgg cagggggctc tggagacagc aacatggccc cttcctggct caggcctggt
                                                                 4500
teeteaggeg geteeetgga gteegetgge tetteaacae eeacaggeaa ggggggeteg
                                                                 4560
tecageatgg agggeegete etcaggggee acageeteag tetegatgte caceteetet
                                                                 4620
tecatgeeca aegagteeae tgeaggtgee eeeggggeea gageegette eteceegtee
                                                                 4680
tgctcaaagt cctcagggcc tgcagaagcc atgctttcct cggccaccat ctcctcctcc
                                                                 4740
teetettett eeteetette eetggeeact aceteeteet eateeteega ggatgaggge
                                                                 4800
gaggactcgg agcttgactc aaactc
                                                                 4826
```

```
<210> 3618
<211> 818
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (58)...(464)
<223> similar to gi1237278 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3618
ctgatcggac atggtacatt cttgagagcc actaacaata tggaacagga tcacacatct
                                                                       60
gctcccttat tgttaaagat gagaaaaccc taggagagaa acctttcaaa tgtgatgagt
                                                                      120
gcggaaaggc cttcaggcac acctccagcc tctgcatgca tcaaagagtc cacacaggag
                                                                      180
agaaacccta taaatgttat gagtgtggga aggcgttcag tcagagttcg agcctctgca
                                                                      240
tccaccagag agtccacact ggagagaaac cctatagatg ttgtggatgt gggaaggcct
                                                                      300
tcagtcagag ttcgagcctg tgcatccacc agagagtcca cacaggagag aaacctttca
                                                                      360
aatgtgatga gtgcggaaag gccttcagtc agagtacgag cctctgcatc caccaqagag
                                                                      420
tccacacaaa ggagagaaac catctcaaaa tatcagttat ataaaacgtt ttgctaagag
                                                                      480
tttaaaatct taaaacccat aagtgccact aggaaggaaa ccctgtatat acctacattg
                                                                      540
acccaagaaa tatttacgca atccctagca gaacattgtt tctgaggagg catatgtgag
                                                                      600
attgatttgt tggttcatgc caagtgtgtt ccacaggttg actttgaatg tggacctctg
                                                                      660
agcatccacg caggatggct ctcaggtccc agtcacagac gtcgttttct gggatttcag
                                                                      720
cacgatgeet ccatagttga aagactacac aaaaageeae aateattgee eggeeteetg
                                                                      780
agtcaccttc tatctatact ttgcttaaaa gctattcc
                                                                      818
```

```
<210> 3619
<211> 4364
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1682)
<223> similar to gi3327120 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3619 gcgcagttag agccgatctc ccgcgccccg aggttgctcc tctccgaggt ctcccgcggc 60 ccaagttctc cgcgccccga ggtctccgcg ccccgaggtc tccgcggccc gaggtctccg 120 cccgcaccat gcggctgggc agtcctggac tgctcttcct gctcttcagc agccttcgag 180 ctgatactca ggagaaggaa gtcagagcga tggtaggcag cgacgtggag ctcagctgcg 240 cttgccctga aggaagccgt tttgatttaa atgatgttta cgtatattgg caaaccagtg 300 agtcgaaaac cgtggtgacc taccacatcc cacagaacag ctccttggaa aacgtggaca 360 gccgctaccg gaaccgagcc ctgatgtcac cggccggcat gctgcggggc gacttctccc 420 tgcgcttgtt caacgtcacc ccccaggacg agcagaagtt tcactgcctg gtgttgagcc 480 aatccctggg attccaggag gttttgagca ttgaggttac actgcatgtg gcagcaaact 540 teagegtgee egtegteage geceeceaca geceeteeca ggatgagete acetteaegt 600 gtacatccat aaacggctac cccaggccca acgtgtactg gatcaataag acggacaaca 660 gcctgctgga ccaggctctg cagaatgaca ccgtcttctt gaacatgcgg ggcttgtatg 720 acgtggtcag cgtgctgagg atcgcacgga cccccagcgt gaacattggc tgctgcatag 780 agaacgtgct tctgcagcag aacctgactg tcggcagcca gacaggaaat gacatcggag 840 agagagacaa gatcacagag aatccagtca gtaccggcga gaaaaacgcg gccacgtggg 900 agcateetgg getgteetgt geetgettgt ggtegtggge ggtggeeata ggetgggtgt 960 gcagggaccg atgcctccaa cacagctatg caggtgcctg ggctgtgagt ccggagacag 1020 agctcactgg tgagtttgcc gtgggaagca gcaggttctg gggggcccag gggaggcttg 1080 1140 aacaactgtt gttcctggag acgcagcgaa gccctcgatg gtgcgcacgg catttcctgc 1200 agcctcccct tggcatggga tggcatcctg gtgtgcactt tgtcacactg cgatgggatt 1260 ttcccaacat gcacagaagc agagagacga gtgctagacc cccgcgctcc ccagtgccca 1320 gccccgacca gggtgtccag ggcgggtcca ggcaccggcg cccagccccc atggggtgtc 1380 cggagtgggt ccaggcaccg gcgcccagcc cccgtggggt gtccaggcg ggtccaggca 1440 ccggcgccca gcccccgtgg ggtgtccagg gcgggtccag gcaccggcgc ccagcccca 1500 tggggtgtcc ggagtgggtc caggcaccgg cgcccagccc ccgtggggtg tccagggcgg 1560 gtccaggcac cggcgcccag cccctgtggg gtgtctggag cgggtccggg caccgccagc 1620 ttctctctgt ggcagccact cctgcagctc tcgtttgccc ctcagttcca ggagcaacat 1680 agatgtggat teetgteeaa tttgggaaaa atgteeacae aeggteacee aeetggeagg 1740 tgcctctggc tgcaaggggc gctgggcttc gcaggcaggc cagccgggct ccccqccatq 1800 ggccaggatc ccctccgagc cctgtttgcc gcccaggaga aggggttccc cggggacagt 1860 gggctcaggg tgtgcgcagc caccacgctg tggtgtcacc tgtggaccca ggcgagctga 1920 tgqccgaccg cagaaacgca cttccaaggc caggtcggcc catccagatg atgcaggaac 1980 acagettget aaaaacaegg eeggeetgtt eeegteggag eeagtegaag tteeetgaae 2040 aggccgctgt ttccgaagct ttaaaccctg tgtttccacc aagctgagtc ctgagaaaac 2100 eggegtetge etgeagaagg gaaaggggtg etteatgtte etetetete tteateteee 2160 ttccaaggcc acgtttgacc ggagctcacc gcccagagcg tggacagggc ttccgtgaga 2220 cgccaccgtg agaggccagg tggcagcttg agcatggact cccagactgc aggggagcac 2280 ttggggcagc ccccagaagg accactgctg gatcccaggg agaacctgct ggcgttggct 2340 gtgatcctgg aatgaggccc tttcaaaagc gtcatccaca ccaaaggcaa atgtccccaa 2400 gtgagtgggc teccegetgt cactgecagt cacceacagg aagggaetgg tgatgggetg 2460

```
tetetaceeg gagegtgegg gatteageae caggetette ceagtaceee agaceeaetg
                                                                     2520
tgggtcttcc cgtgggatgc gggatcctga gaccgaaggg tgtttggttt aaaaagaaga
                                                                     2580
etgggegtee getetteeag gaeggegtet gtgetgetgg ggteacgega ggetgtttge
                                                                     2640
aggggacacg gtcacaggag ctcttctgcc ctgaacgctc ccaacctgcc tcccqcccqq
                                                                     2700
aagccacagg acccactcat gtgtgtgccc acaagtgtag ttagccgtcc acaccgagga
                                                                     2760
gcccccagaa gtccccactg ggcttcagtg tcctctgcca cattccctgg gaggaacaat
                                                                     2820
gtccctcggc tgttccggtg aaaagttgag ccacctttgg aagacgcacg ggtggagttt
                                                                     2880
gccagaagaa aggctgtgcc agggccgtgt ttggctacag gggctgccgg ggctcttggc
                                                                     2940
tetgcagega gaaagacaca geecageagg getggagaeg eecatgteea geaggegeag
                                                                     3000
gcctggcaac acggtcccca gagtcctgag cagcagttag gtgcatggag agggtatcac
                                                                     3060
ctggtggcca cagtccccct tctcacctca gcaatgatcc ccaaagtgag aggtggctcc
                                                                     3120
cccggccccc accaccctca gcagccccac cccactcaac cctgagggtc cccagggtcc
                                                                     3180
tgatgaagac ctccgacccc agcgccaggc tcctcggagc ccaacaqtcc caaqqqqqca
                                                                     3240
gtgctgaggg gtacagccct gggccctgac cagccccggc acctgccatg ctggttcccg
                                                                     3300
gaatgaatca gctgctgact gtctccagaa gggctggaaa ggatgctgcc aggtgacccg
                                                                     3360
aggtgcactc gccccaggga gatggagtag acagcctggc ctggccctcg ggacacattg
                                                                     3420
tctgccccgg gactatgggc aaatgcccct ccttcttact tcccagaatc ccctgacatt
                                                                     3480
cccagggtca gccaggacct gttacagccc tggtcacttg gaactgacag ctgtgtgagg
                                                                     3540
cctgcacttc tcagacccag acttagaaca aaaqqaqqaq tqaqqactca aqqctacaat
                                                                     3600
gaggttccag tacttgttac aagaaattgg ttttctgcaa aaaaagtccc tacctgagcc
                                                                     3660
tttaggtgaa tgtgggatcc actcccgctt ttaacatgaa agcattagaa qatqtqtqqt
                                                                     3720
gtttataaaa gaacagttgt catcaccggg cattgattgg cagggacaag gagctgcttg
                                                                     3780
ggtgtggaaa gttggggcgt tggaaagtgg gctgtggtgc ccatttgcag tgactgtgaa
                                                                     3840
gtgactccag gacggacctg cgggggcacc cagaggtcct aagccccagg actgagggtc
                                                                     3900
gtgcatcacc actegggtgt ecegggaggt geeetgggee eggggaeete acaggeagga
                                                                     3960
cggcgacact aatgcaggga gagggagtct ggcccagct tttcctatca gaggcgattt
                                                                     4020
tccttcacca ggggatgggc aggaaagagg caggggcccc agaagcttct gtccctcatg
                                                                     4080
cctgagggca cgggggacac ttggaggctg ctgtcaccac tgtgcgtcca aqqccatgct
                                                                     4140
ctctgcgggt cagtgcctga gtctcgcctc cctgctggtc cctgaagccc cctcagaagc
                                                                     4200
cctgcctgtc acgtcggcat ttgtgagacc taccctgtaa cgcctgcccc tctcagccca
                                                                     4260
acatcagett cetetteete eettgetgta gacaggetgg attecagtgt tgggacagee
                                                                    4320
atctccacaa acctgactta agagagtaag atgcaaaaaa aaaa
                                                                     4364
```

```
<210> 3620
<211> 541
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (104)...(335)

<223> similar to gi3219340 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3620

tttcgtgcga ggcccgggca gcatcggcgg cgtggtcaga gcgagtctcg gagaagatgt 60

ggtggcttcc gtttgttggt ggaggaggtg gcaggcctcg gcgggtaacc cagagaacac 120

agccgaagtg gaatgtgggg acgtctgcga caccggggac agagcaactg tggatgaaga 180

gggctacatc tggttcctgg ggaggagtca tgacactatc aatgcctctg ggtggtgaag 240

gcattgattg tcctgaccc acagtttctg tcccatgaca aggaccagct gactaaggag 300
```

```
ctgcagcagc atgtaaagtc agtgacagcc ccatgtattg ggtgttagga atccataata 360 cagtgaaccc ataattgact gcaagcatca ctttcaaagc atcatttcag gatgagaatt 420 taagtgccaa gtgaattcaa ggaacagtgc aaaggatcca tggcctcagt caccatgaag 480 accctcccaa gagccagccc tactgggaac atataaatga gtggagacct ggaatacgaa 540 a
```

```
<210> 3621
<211> 798
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (287)...(771)
<223> similar to gi897849 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3621
tttcgtagca aacaggtttc acgaccactg ctctctggag tcttattcct cagagtatga
                                                                       60
gcccttgacc aaggagcatg gaatgcatca cctatgtttg aacaagggcg ccagatgacc
                                                                      120
tetgeggace cagggtttgg gaagtgetga tgtggageca caggaettgt tttagggegt
                                                                      180
gtggggcgtg tgtgtgagtg ggcttctgca ggtgggcagc cagcgggcac aggcgtggag
                                                                      240
agcatggtca cccatggaga caccgctcac ggggactttc ctttggcccc acatcccgca
                                                                      300
gggtctcttc ttcgatgatt cctatggctt ctacccaggc caggtgctca ttggccctgc
                                                                      360
caagatette tecagegtee agtggetgte aggtgteaag eeegtgetea geaceaagag
                                                                      420
caagttccga gtggtggtgg aagaggtgca ggttgtagag ttgaaagtta catggattac
                                                                      480
caaqagtttc tgtccagggg gcacggacag cgtcagcccc ccacgtctgt catcacccag
                                                                      540
gaaaacctag gcagggtgaa gcgtctcgga tgctttgacc atgctcagcg gcagcttggg
                                                                      600
gagcgctgtc tgtatgtctt cccagccaag gtagagccag ccaagattgc ctgggaatgt
                                                                      660
ccagaaaaaa actgcgccca gggggagggc tctatggcca agaaggtgaa gcgcctgttg
                                                                      720
aagaagcagg ttgtgcggat catgtcatgc tccccagaca cccaqtqttc ccqqqaccat
                                                                      780
tccatggaag acccagac
                                                                      798
```

```
<210> 3622
<211> 1708
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1709)...(510)
<223> similar to gi434779 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3622
ttaaaagtca cactagataa gacatcttta ttacttaatc tttaaaacag gtcactgtgc
                                                                       60
ctattcaatt ctgaaactgt ttgttttctt tccctccccc gcactcccgc tctgatacac
                                                                      120
aaacttgttg taaaaataat gcagaaacat atacqtcaat ctaaqtctct qaaatatqqc
                                                                      180
caactctacc tcgccgtata tccaacatta aaaagaaaaa aaaaggctgt ttaagaatag
                                                                      240
aactcattcc cggtttccac caaattattt ccctaattct taaatcctca aataagttct
                                                                      300
taatctccaa agtctcggtt gtgggaaaaa cattaatttg tgcagtccaa cacttacata
                                                                      360
ctttcttgac ggaagggcaa tcctgtccct ttaaactcaa tgaaggcagc ggccaggtcc
                                                                      420
ttctgagtcc ccgtataatt gcctagaact taacatttag tattcatagt ccttggttta
                                                                      480
cagacgggtc cgacagttag aaactattac ttcctcctct ttcctcctgg gcgctqtcct
                                                                      540
ccttttctct tgccacccaa gccaggcggc ccagaattca tcttgcctcc caagccccct
                                                                      600
ttcctcttcc ctccctggct gggcgggccc cctttcctct tgcccccagg cccctqccqq
                                                                      660
cetecettte tettgeeett etggeteatt tteeteetet tggeggeete eteetggtee
                                                                      720
tcctccctca tctgcttatt ggtggcccta gtcacatcca gcttgaggct tcttgctgtt
                                                                      780
catgacacga agcagctcca actggttctt tttctcggct gcaaagtccc cgaaaagggg
                                                                      840
ttgaaacttc cttttcttgc cggagccccg gggcaccttc tccttgggga ggcgctcctg
                                                                      900
aaagcgcccc acagaggcgg tggagacctt ggccacttgc atggcgcggc ccagctcctc
                                                                      960
cttactctgg tgtccggtag ggtgcaagcc ggccgcgctq ggcaqctqca tcttgtgcgc
                                                                     1020
gcgggccagg ttacgcagcc ggttcagctc gttcttggcc accetttect tettggcctg
                                                                     1080
aatccgcttg gcgaactggt cctccaaggg gtcggcattg ccgggcacct caatcagcca
                                                                     1140
ttctttggtg tcgtcccggg cgcgctggta gccccagcgc cgccgccact ggccactcac
                                                                     1200
ctcgtcccac accaggttgg tcttcttctt gggacggatg cccttgaggc gcgcgaactg
                                                                     1260
ctgccagcgt gtaagtggcc cgcggtcggg gcagaggctt ctctcgcggc aggcgtgtgg
                                                                     1320
tgggctccgg cagccgcgcc actatcgcct cttccacgcg ctccqtqqqc aqctqccaca
                                                                     1380
getggttgat gageagttge gtgttgtece gegeeaggge etgtageteg geeteeggeg
                                                                     1440
tgggtccggc gcaccgcagc ccggtcgggg ggttccggtc cqacqccaqc aqqttqccca
                                                                     1500
ggtcaaactg cagctccagc teettgtgca eegtgatgeg ttgcaactte tetgeetegt
                                                                     1560
cctgctctgc ctttgcgagc agctcctcca cgctctggcc ctccatggct ccggctcggc
                                                                     1620
tcactcgctt tggggctgca gctgaagtta cttttcctac agtggcggcc caaactccqq
                                                                     1680
cagcataacc acgtgcagat gccgggat
                                                                     1708
     <210> 3623
     <211> 828
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (16)...(500)
     <223> similar to gi506664 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3623
aaccggatgc tgtagctcac ggacaccccc cccccaaga cacatatgat ccaccattcc
                                                                       60
atctctgact ataaggccac cctgaggtgc tgggccctgg gcttctaccc tatqqaqatc
                                                                      120
acactgacct ggcagcagga tgaagaggac cagactcggg acatggagct tgtagagacc
                                                                      180
aggcctgcag gggatggaac cttccagaag tgggcagctg tggtggtgcc ttctggagag
                                                                      240
gaacagatac atgtgccatg tgcagcatga ggggttgccc gagcccctca ccctgagatg
                                                                      300
```

360

ggagcagtet teteageeea ceateceeat egtgggtate gttgetggee tggtteteet

```
tggagctgta gtcactggag ctgtggtttc tgctgtgatg tgcaggaaga agaactcaga
                                                                      420
tagagtgagc tactctgaag ctgcaagcag cgaccatgcg cagggttctg atgtgtctct
                                                                      480
cacggcttgt aaagtgtgag acagctgcct tgtgtgggac tgagaggcaa gatttgttca
                                                                      540
egeetteeet ttgtgaette aaaaaceetg actetettte tgeaaaggea eetgaatgtg
                                                                      600
cctgtgttcc tgtaggcata atatgaggag gtggggagac caacccaccc ccatgtccac
                                                                      660
catgaccete tteecteatg etgacetqtq tteectetee aataattaat catteetget
                                                                      720
ccatagacgt gaggctgaga tgtctccatc tctgtctcaa ctttatgtgc actgagctgt
                                                                      780
aacttcttac ttccctatta aaattagaat ctgagtataa aaaaaaaa
                                                                      828
```

```
<210> 3624
<211> 4530
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)...(2018)
<223> similar to gi307121 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3624 tttcgtgaca gtagcccctg ctcggccttc gagttccact gcctaagtgg cgagtgcatc 60 cactccagct ggcgctgtga tggtggcccc gactgcaagg acaaatctga cgaggaaaac 120 tgcgctgtgg ccacctgtcg ccctgacgaa ttccagtgct ctgatggaaa ctgcatccat 180 ggcagccggc agtgtgaccg ggaatatgac tgcaaggaca tgagcgatga agttggctgc 240 gttaatgtga cactctgcga gggacccaac aagttcaagt gtcacagcgg cgaatgcatc 300 accetggaca aagtetgeaa catggetaga gactgeeggg actggteaga tgaacceate 360 aaagagtgcq ggaccaacga atgcttggac aacaacggcg gctgttccca cgtctgcaat 420 gaccttaaga tcggctacga gtgcctgtgc cccgacggct tccagctgqt qqcccaqcqa 480 agatgcgaag atatcgatga gtgtcaggat cccqacacct gcagccagct ctgcgtgaac 540 ctggagggtg gctacaagtg ccagtgtgag gaaggcttcc agctggaccc ccacacgaag 600 gcctgcaagg ctgtgggctc catcgcctac ctcttcttca ccaaccggca cgaggtcagg 660 aagatgacgc tggaccggag cgagtacacc agcctcatcc ccaacctgag gaacgtggtc 720 gctctggaca cggaggtggc cagcaataga atctactggt ctgacctgtc ccagagaatg 780 atctgcagca cccagcttga cagagcccac ggcgtctctt cctatgacac cgtcatcagc 840 agagacatee aggeeeeega egggetgget gtggaetgga teeacageaa eatetaetgg 900 accgaetetg teetgggeae tgtetetgtt geggataeca agggegtgaa gaggaaaaeg 960 ttattcaggg agaacggctc caagccaagg gccatcgtgg tggatcctgt tcatggcttc 1020 atgtactgga ctgactgggg aactcccgcc aagatcaaga aagggggcct gaatggtgtg 1080 gacatctact cgctggtgac tgaaaacatt cagtggccca atggcatcac cctagatctc 1140 ctcagtggcc gcctctactg ggttgactcc aaacttcact ccatctcaag catcgatgtc 1200 aatgggggca accggaagac catcttggag gatgaaaaga ggctggccca ccccttctcc 1260 ttggccgtct ttgaggacaa agtattttgg acagatatca tcaacgaagc cattttcagt 1320 gccaaccgcc tcacaggttc cgatgtcaac ttgttggctg aaaacctact gtccccagag 1380 gatatggtcc tcttccacaa cctcacccag ccaagaggag tgaactggtg tgagaggacc 1440 accetgagea atggeggetg ceagtatetg tgeeteeetg eeeegeagat caaceeceae 1500 tegeceaagt ttacetgege etgeceggae ggeatgetge tggecaggga catqaggage 1560 tgcctcacag agggttgagg ctgcagtggc cacccaggag acatccaccg tcaggctaaa 1620 ggtcagctcc acagccgtaa ggacacagca cacaaccacc cggcctgttc ccgacacctc 1680 ccggctgcct ggggccaccc ctgggctcac cacggtggag atagtgacaa tgtctcacca 1740

```
agctctgggc gacgttgctg gcaagaggaa attgagaaga agcccagtag cgtgagggct
                                                                 1800
1860
atggaagaac tggcggctta agaacatcaa cagcatcaac tttgacaacc ccgtctatca
                                                                 1920
gaagaccaca gaggatgagg tgcacatttg ccacaaccag gacggctaca gctaccctc
                                                                 1980
2040
tgcccagaac ccttcctgag acctcgccgg ccttgtttta ttcaaagaca gagaagacca
                                                                 2100
aagcattgcc tgccagagct ttgttttata tatttattca tctgggaggc agaacaggct
                                                                 2160
teggaeagtg cecatgeaat ggettgggtt gggattttgg tttetteett teetegtgaa
                                                                 2220
ggataagaga aacaggcccg gggggaccag gatgacacct ccatttctct ccaggaagtt
                                                                 2280
ttgagtttct ctccaccgtg acacaatcct caaacatgga agatgaaagg gcaggggatg
                                                                 2340
teaggeecag agaageaagt ggettteaae acacaacage agatggeaee aacgggaeee
                                                                 2400
cctggccctg cctcatccac caatctctaa gccaaacccc taaactcagg agtcaacgtg
                                                                 2460
tttacctctt ctatgcaagc cttgctagac agccaggtta gcctttgccc tgtcaccccc
                                                                 2520
gaatcatgac ccacccagtg tctttcgagg tgggtttgta ccttccttaa gccaggaaag
                                                                 2580
ggattcatgg cgtcggaaat gatctggctg aatccgtggt ggcaccgaga ccaaactcat
                                                                 2640
tcaccaaatg atgccacttc ccagaggcag agcctgagtc actggtcacc cttaatattt
                                                                 2700
attaagtgcc tgagacaccc ggttaccttg gccgtgagga cacgtggcct gcacccaggt
                                                                 2760
gtggctgtca ggacaccagc ctggtgccca tcctcccgac ccctacccac ttccattccc
                                                                 2820
gtggtctcct tgcactttct cagttcagag ttgtacactg tgtacatttg gcatttgtgt
                                                                 2880
tattattttg cactgttttc tgtcgtgtgt gttgggatgg gatcccaggc cagggaaagc
                                                                 2940
ccgtgtcaat gaatgccggg gacagagagg ggcaggttga ccgggacttc aaagccgtqa
                                                                 3000
togtgaatat ogagaactgo cattgtogto tttatgtoog occaectagt gottocactt
                                                                 3060
ctatgcaaat gcctccaagc cattcacttc cccaatcttg tcgttgatgg gtatgtgttt
                                                                 3120
aaaacatgca cggtgaggcc gggcgcagtg gctcacgcct gtaatcccag cactttggga
                                                                 3180
ggccgaggcg ggtggatcat gaggtcagga gatcgagacc atcctgqcta acaaqqtgaa
                                                                 3240
accccgtctc tactaaaaat acaaaaaatt agccgggcgt ggtggcgggc acctgtagtc
                                                                 3300
ccagctactc gggaggctga ggcaggagaa tggtgtgaac ccgggaagcg gagcttgcag
                                                                 3360
tgagccgaga ttgcgccact gcagtccgca gtctggcctg ggcgacagag cgagactccg
                                                                 3420
tctcaaaaaa aaaaaccaaa aaaaaccctt gcttggggca tcagcagccc ttggcctctg
                                                                 3480
gccaggcatg gcgaggctga ggtgggagga tggtttgagc tcaggcattt gaggctqtcq
                                                                 3540
tgagctatga ttatgccact gctttccagc ctgggcaaca tagtaagacc ccatctctta
                                                                 3600
aaaaatgaat ttggccagac acaggtgcct cacgcctgta atcccagcac tttggqaqqc
                                                                 3660
tgagctggat cacttgagtt caggagttgg agaccaggcc tgagcaacaa agcgagatcc
                                                                 3720
catctctaca aaaaccaaaa agttaaaaat cagctgggta cggtggcacg tgcctgtgat
                                                                 3780
cccagctact tgggaggctg aggcaggagg atcgcctgag cccaggaggt ggaggttgca
                                                                 3840
gtgagccatg atcgagccac tgcactccag cctgggcaac agatgaagac cctatttcag
                                                                 3900
aaatacaact ataaaaaaat aaataaatcc tccagtctgg atcgtttgac gggacttcag
                                                                 3960
gttctttctg aaatcgccgt gttactgttg cactgatgtc cggagagaca gtgacagcct
                                                                 4020
ccgtcagact cccgcgtgaa gatgtcacaa gggattggca attgtcccca gggacaaaac
                                                                 4080
actgtgtccc ccccagtgca gggaaccgtg ataagccttt ctggtttcgg agcacgtaaa
                                                                 4140
tgcgtccctg tacagatagt ggggattttt tgttatgttt gcactttgta tattggttga
                                                                 4200
4260
tttgcaaacc ctggttgctg tatttgttca gtgactattc tcggggccct gtgtaggggg
                                                                 4320
ttattgcctc tgaaatgcct cttctttatg tacaaagatt atttgcacga actggactgt
                                                                 4380
gtgcaacgct ttttgggaga atgatgtccc cgttgtatgt atgagtggct tctgggagat
                                                                 4440
                                                                 4500
gggtgtcact ttttaaacca ctgtatagaa ggtttttgta gcctgaatgt cttactgtga
tcaattaaat ttcttaaatg aaccaaaaaa
                                                                 4530
```

<210> 3625

<211> 2343

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(2344)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2090)...(1160)
<223> similar to gi3820985 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3625
ttttttttt ttatgtggat aatatttatt tgtatcttat ctatagaaca aatatttaca
                                                                       60
gatacaaacg gaatcacagc aaagttgcta taaaaccatc cagacctctc gatggccact
                                                                     120
tctgaaaaca tccacggtga agggcagggc caggcctggc tgtggagtgg gccagctgag
                                                                     180
tacctgggcg tcagccaagg gaaatggttg gggattatgg cttcagcact ctgccggagc
                                                                     240
acatteetga gegetgacaa egtggageee teacegeeee cacetaceee aaceteaatg
                                                                     300
gggaaggaaa ggggcctgag ctggccaggg ctgcccgggc tcactatgtg cctgctccag
                                                                     360
gagtccctgg cccctgtgct ggcaggagca tccctgagct ggaccgggag gcctctctgg
                                                                     420
cctggggctg ctccctgccc ggcaggctgc tgtttggcag ctggaggtgg caagagctgc
                                                                     480
tggtgctgcc agggcgtgtt ggccaggaat gagctcccag ggcagccctg aggaaagggt
                                                                     540
cttaggaagc gcctcccagc tcactactag gagctgggga ctgtcagtgc tgagtgggc
                                                                     600
tggggtacag gagcacctgc ctctcctttc tttggcttag aagtggggaa ggaagggcca
                                                                     660
ggaaaaggga ccaaagccgc cccagccttg gcccctaggc cgcctgggga ctgtgtgtt
                                                                     720
gctgaggggg cagtgggagg tgggcagctc tggagttccc tgcaccctqg gatccttqqq
                                                                     780
ctgctctcac tcccggggtc ccagcagggc aaggcctctg cttgggacca gtgctgctct
                                                                     840
tcctcgctgc ttactccagg aggtgaaggt gacagggcgg caaggagagg taaccacagc
                                                                     900
atggctgggg acaggcgcta cactgggccc cggacccagc acagggatca cagtgtcggt
                                                                     960
ctcgcgcaca cacctctggc cacatgtgca caccacatac atccacacgc acctcctcc
                                                                    1020
tgtctggcgg gaggctcatt ctctctcgca gccactcgcc ctctctgcct ctcacatatg
                                                                    1080
cggtcacaga gtgaatccga gcatcttatt gctgcagggg gcaggggggt cggcatcagg
                                                                    1140
gaaagttaat ccacgaagag cgagaacagc accattacca cgatgcccgc acagagcaga
                                                                    1200
agcagctgct gcagggagcg ccacgggtcc tcttcttcca agaggtcagg gagcacgttc
                                                                    1260
accaaggcga tgtagagaaa gccgccagag gtgaagggca ggacccaggc tgccgtctcc
                                                                    1320
tctactccct tgggggactg ggtacagatg gcgaagccag cgcccagtag gccccccagc
                                                                    1380
gctgttgaga gttgcagctt ggctgcgctc catcggtcaa agccqqcccq qaqcaggatg
                                                                    1440
gcaaagtcgc ccacctcatg ggggatctca tgcaggagga tggccatggt tgtcaggagc
                                                                    1500
ccgatcttct tgctcacaag gaagctggca gccacagcca gcccgtgggt gaagttatcq
                                                                    1560
atggtgttgg ccagcaggtt gaggtagccg ctgactttga tgctccggac cacggcaccg
                                                                    1620
aggccgggct ctgcagccgg ctgggccaga cagtggcctc cattgagcgc ggcggcagca
                                                                    1680
gcagtggggt ctttgttggg ggcctggctg gtcccctcct ccttgctgtc caggaacatc
                                                                    1740
ttctccaacg ccaggaaggt caggatgcca gcaatgaccc acagccccag ctgttqctqc
                                                                    1800
tgctgcaggc tctgcccctc accaccaggg ctggcgctgc acgtgtaggc ccaggcttcg
                                                                    1860
ggcagcagat gcagaaacac attgcccaag agtcccccca gggcgaagct gagcagctgc
                                                                    1920
ttcaggcgcc aggccccagc ttctgagcgc agcatggtcc ccatctctag gggaatgaca
                                                                    1980
agcaacggga agaccccact gagccccacc atgagggaac ccaggaggga gcagatccag
                                                                    2040
gtgtccagcc gctctccgct cagcagagcc ccccaggact cgctttcctt gttgtccagg
                                                                    2100
cgacaggeeg tegeagteee eeggeteegg agggeegget gggaaceece ageeetteee
                                                                    2160
aagagctcca gggcaagggc agtgaggaag aggagccttg ggcccgccat gccacagcca
                                                                    2220
gggcagggac atccaggcat gccacgtacg tgcggcggcg gcggcggcga tccgggcggc
                                                                    2280
cccagcccgg gaattcggtn neggtcgtcg tgcgtacggc ttcaatnatc aaanngnggc
                                                                    2340
acq
                                                                    2343
```

```
<210> 3626
<211> 1325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (249)...(465)
<223> similar to gi2564001 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3626 gggaaagtga gtgctggcca ggctggggcg gacagaacac ttcgacgggc tccggagccc 60 agattcagcc aggaacccac aggcaactcg gcctaccccc agctgaggcc ctttttggac 120 ccgcagggga gagatettaa acccagcget ttggteccae ccacccgete ccacactggg 180 aggagaccat ggctccacac acagcccctg ccaggcccac aggggcgggc atgggggccc 240 acctgcctcc tgcatgtgtg gacagggtcc tggagagtga ggagggccgc agggagtacc 300 tggcgtttcc caccagcaag agctcgggcc agaaggggcg gaaggagctg ctgaagggca 360 acggccggcg catcgactac atgctgcatg cagaggaggg gctgtgccca gactggaagg 420 ccgaggtgga agaattcagt tttatcaccc agctgtccgg cctgacggac cacctgccag 480 tagccatgcg actgatggtg tcttcggggg aggaggaggc atagaccgtc cggagcagtg 540 gggcctctgc cagcccttgc agctgcagcc catccctggg ccatqtcccc tccatcqaqt 600 gcccggtgct tgggggagga gggcagggac agggagggag ccacagtcag tgcccgggaa 660 cctggaaget gcgctgctct gcgcctctgg gcctcactgt ggacagagga gtcaggcccg 720 ecceaggage etecagetge etaaceagtg ceattettte acaacaegat tttetacaaa 780 totacagoac aacogagttt gtaacoogtg ggttagtatg aggacogggt togtgtacto 840 tetgtatete etettaaget tegteeaggg ttetttattt ttgtetgetg ceaatgtegt 900 ctcgcatgcc tgcaccctcg catgcacgct gcccgcatgc cacgtgccac gctgtagcca 960 cagaccectt getegggeet cacceaagge caaactecaa acacaateag aaccagecaa 1020 agaagcactt cctgggcacg gccaccagct ctcccgcctc cagtgtgggc cggctcctgc 1080 agggtccgag ggctgcatct ctaccagcca gcccagggct cttcccaggg tctcgcattc 1140 aagggcaatt acattttaaa aagaaaaaca gaaaaaggtt aatcacaaaa ccaaccttca 1200 cttcacaggg tctgtaagtc actcatagaa ctttgctctt cccgagacag ggtcccttcc 1260 ccagctcagg cacaacagag tctggcaggc tctggcaccc tgggcctcct ccgggagcct 1320 cccat 1325

```
<210> 3627
<211> 1458
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1424)...(490)
<223> similar to gi3881305 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3627
ttttttttt ttcaggctta aataacaaaa tatatttcag atatgcacag ttttaactga
                                                                       60
ggactacaca agectteete gggetgeagg eeegeegeee teeeagtggg atteacagee
                                                                      120
cctgcggagt ttgtcctcac gcacaccaca cacgatcggg tataaaacac attctataaa
                                                                      180
cacgttctga tgcaaactgt gtgtccataa atatatattt atgcaagttc ctcccaccca
                                                                      240
ctgcagggcc gtacagctct ggggacagga ggtcacagcc gactttaaac cacaggttaa
                                                                      300
gtagaaggtt gcaggtcaaa tagaagttcc cgtgtgattg catcacccaa cggcactgtt
                                                                      360
ctgtcatcag gaaatgctga gtgcccgccg tggccgggtg ggcgcgggcg gtggtcagac
                                                                      420
gctgctctgg agctggctat ctgtggcact gtcaggggct gaggactggc tgggcagaca
                                                                      480
agtttccagg ccatctgaag actccgacag gggcttgtat aagaagcagg ctatggcaaa
                                                                      540
gaagaggacg cccagcacct tgtacaggag ccccatgatg agtatgtagc gqctcatqqc
                                                                      600
cgaattctgg tacaccaagc aggagccctg ctggccacac tggtcctgcc acagcagaca
                                                                      660
ggccttgtcg atcacccagc cgaaggcgat gggccccggg atgcccccta qtattctaac
                                                                      720
tacaatccac tggattccca gggcaaagga tctctgaggg tcacggacac atcqtagagt
                                                                      780
tgccgttagt gcaggaatgc tgctgaggaa tgtaaagaaa attacaacga atatgaaaac
                                                                      840
cagaaggagg ggctttctct gacaagttga agtgcatttc cctgcagtgg catggccaaa
                                                                      900
accagaggaa agattetgag ggatacaget acagtetegg tacacetggg aageecaaca
                                                                      960
atagctccga ttacaagggg aaggcacggg ggccccttcc cagggtccag gggaggacag
                                                                     1020
gggcggtagg cagcggctcc actcaccttc tggccgtcca cattcgtctc cgtggctgca
                                                                     1080
gggcaccctg cgtggcacag tgagaagtac atgaggccgt ccgagccgca cacagggctg
                                                                     1140
tagtgttctg gctggcagct gcaggcagcg ttgcagggag ccgttaggtt caggtggcct
                                                                     1200
tegggeagga ggeteeegee gtagetgget gtgaegeeeg ceatgggeac actggggeag
                                                                     1260
tgcagtgaga agacgaggat gcccagcagg ctgacaacgg tgcagaacag gcagaacttg
                                                                     1320
atgaccgcgg agccccggag cctgagcttg ttcacaaaga agccgcccag gaaggtgccg
                                                                     1380
ccaccaccg ctggcaccac caggtaccca aacaaggtgg cagcttctga ggcactcagg
                                                                     1440
cgaattccac cacacgga
                                                                     1458
     <210> 3628
     <211> 910
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (730)...(242)
     <223> similar to gi755646 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3628
tttttttttt ttcccagctc acacatcttt attggcctgg atgtggggtt gccaaaccag
                                                                       60
ttgcccctgt cctgtgtcag ccagctgtgg caatttcacc cttattcctt ggagaggcca
                                                                      120
gctgcctgct ggaaggagtc agaagtcggt ggatgtcatt gaggccttgg aggccccagt
                                                                      180
ctggcgggag agaaatccac acctgtgcct ggagttctcc ttccctgacc ctctgaaccg
                                                                      240
gegettaaaa tgetgteeeg eetggaacag ggaggeeaca teeageagtg egteeteaat
                                                                      300
gtgctgcccc agcctgtggg aatccgtttt tgtgcttgat tttttgctgg agatgtggaa
                                                                      360
ggtgatcatg ccatcccca tgaagatata agaaacacca taaccatggt catcagcagg
                                                                      420
ecegaateea eegeetgagg aaacatagte egggtaattg tggaegteaa acagatgeat
```

480

```
ttgctgaaca gggatctggc tggtggacag ctgccactgc tccgaatgga cctgqqtcaq
                                                                      540
gaagggcgac tgcaggtgga ggaatcggga cacgatgtac agcgcaaaca ggtggcggtc
                                                                      600
aactccctgc ccgctcatgg ctgccttcag cagagcctgg tgcttgtcca ctgccacgcg
                                                                      660
gaacagggcg aggcactgtg ggtcctgcag tccccaggga ggtcacaggt catggaaaga
                                                                      720
caggaagtcg acttagggct gggcctgcgg cacatctggc ctcaactqaq tttqccacat
                                                                      780
ccctgcaagg tgggaatatc aaccccattt tacagatggg gaactgaggc ttagagaggg
                                                                      840
gaaatcattt ggccaggttc acacagccag ggagagccag gcgggttcct aggtgtgtct
                                                                      900
ggccccagag
                                                                      910
```

```
<210> 3629
<211> 2127
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (70)...(1106)
<223> similar to gi2088669 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3629 gcagccccgg caggcggcgg ccccgacccg gaggccttat cggccttccc cggacggcac 60 ctgagtgggc tgagctggcc acaggtgaag cgactggacg ctcttctgag cgagccgatt 120 cccattcacg ggcgcggcaa cttccccacg ctgagcgtgc agccccggca gattcgtgca 180 ggtggtccgc agcaccctgg aggagcaggg actacatgtg cacagagtgc ggctgcatgg 240 ttcagctgcc agccacgtgc tgcaccctga gagtggactg ggctacaagg atctggacct 300 ggtgttccgg atggacctgc gcagtgaggc atcettccag ctgaccaagg cagtggtqct 360 ggcctgccta ctagacttcc tgccggccgg tgtgagccgg gccaagatca cgccactgac 420 actcaaggag gcatacgtgc agaagctggt gaaagtgtgc acagactcgg accgctggag 480 cctcatctca ctgtccaaca agagcggcaa gaacgtggag ctcaagtttg tggactcggt 540 gagacgccag tttgaattca gcatagactc cttccagatc atcctggact ccctqttqct 600 ctttggccag tgctcgtcca ctcccatgtc tgaggccttc cacccaacgg tcacaggcga 660 aagcctgtac ggggacttca ccgaggccct ggagcacctg cggcaccgtg tcatcqccac 720 gcgcagtccc gaggagatcc gaggtggtgg cctcctcaag tactgccacc tcctggtgcg 780 gggcttccgg ccccggccca gcaccgatgt gcgcgccctg cagcgctaca tgtgctcccg 840 cttcttcatc gactttccag acctggtgga gcagcggcgc accctagagc gctacctgga 900 ggcccacttc ggtggggcag atgcagcccg ccgttacgcc tgcctggtga cactgcaccg 960 ggtggtcaac gagagcaccg tgtgcctcat gaaccacgag cgccgccaga cgctggacct 1020 cattgccgca ctggcgctgc aggcactggc tgagcagggc ccagctgcca ctgccgccct 1080 ggcctggcgc cctccaggca ctgacggggt tgtgccagcc actgtcaatt actacgtgac 1140 ccccgtgcaa cctctcctgg ctcacgccta tcccacctgg ctgccttgta actgactcag 1200 accetggcca gaagggaagg gactgggcct cacggggtgg ggtggggcct ccaagagtgt 1260 gtggaggaca tgaccagagg cgcagaatgt gccaggaggc ccagcactgc agggttgggc 1320 ctttgattga acagaccaga ctttcccgag cacgaggccc ctgtgggctt aatgccagcc 1380 tgggggctctc agcaggagga ccctttggtt attgcatcac acttttggac cagcatgccg 1440 gtggggtgca ggcgccattt gtcttggaag tcaatttcct tcaggagaca aagcaagttt 1500 ggggtggtag ccttaatgcc cagcaccttg gattgattcc catggtctaa gagggtcttt 1560 ttgactaagg ccagcctgtg gtgatcccag cagctttgga gggcctgcag cccacacact 1620 gactgataca tggtatgtta cagggacttg tcactttgga tcaggctggg ccactacagg 1680 gcctgatggg ccaacttggg taatcactgg gaggagggaa actgaggccc gaggcagata 1740

```
cctgggtttggggagggctgggtttagcccggttctctgaactacatacccccagctgtg1800aagccttcctcttgaggggttgaggtggcagtatacaggagccaagcagcccagggtgg1860gtcgcagcccaggcccttccagggtgcactcctttcccccttgtgttgcaaggagccc1920tcctgcctgggagcttgttctttggaaggtgctgagcctgaatttgccacagtcaagtca1980acgttcccaccccactggcttggttacagggctctcacatggggtaggggagccatactc2040ccaccccttgcgtattccctgggtttgttgatattttgcactcttaacacctgccaat2100aaagacggtctacactgaaaaaaaaaa2127
```

```
<210> 3630
<211> 1667
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1669)...(962)
<223> similar to gi3046604 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3630 tttttttttt ttctatgtac aaaaacattt taattgaaat acctgtataa aaaaatatga 60 tctccagaca tctcactttt gaactgaaag aacccccatc tgcgatgcct gcacacaccg 120 cattcacaca aacacaggta ctgaataaat taaacgctca ggctctggcc ccaccccagc 180 tttcagagcc cacaagcaga ctgtacaaag tcaataattt aaaacccaaa ccctgggcac 240 agtgcctgga agtgtcaggg tcacccactc cccttaagtt agccactata catgttcatc 300 ttctgacagg cggggccagg acagacgcca ggcacaggaa tcagggcctg gggtccctgg 360 accacagoca coccotocco tgootoccca ctgtcccctg gggcttggga gaggcagact 420 gctcagagga aataacctca acaaataaat taaacaataa atagccccgg tgggccgagg 480 gcacctccag ggggtcacac cataaataac agagttggcg gcgggtacgg ctcgcgtggg 540 cgggcgggcg cggaggccag gacttgcatt gtgtgtgcag gacgtgccca gacgcacacc 600 gcaggactga gggcgggagg tgggcttggg accctgcgcc ggcggaaaga qctccqqqtq 660 ggcaggcaga tgggaaggcc gcctccggac acagcagcac agaggggcgt ctggggttca 720 agtatecace cagggeagge gggaeetega eeggagegte tttggaeaga eagagettga 780 gaaaaccaag tcccgcggga ccagcgttca aaaggcactc aaagcgaagg tcaccagggg 840 tcagaggtca ctgcttccgc aggaggagac ggcccacgca ggaaaaagtc aggqtctqqq 900 ggcgtcccag gtctggccaa ggcaggtggt cccctagctc ccaqtcaggt gcaqctcctc 960 acaagctctc gctgctggac gtggtgctgg ccacgtcatc agggtcgagg gtgcacagcc 1020 gcaggtcaca gctctccggg gcgcccccgt cagcccccag catccaggga tgggccgcaa 1080 tetgatecag egaeggeege tetgagggee geagggaeag geaecaeegg ateagetget 1140 ggcactctgg agagaccctc ctccggaaga gcaggcggcc tcggaggatc tcctcgtcct 1200 gctcgaaggg gatgtcccca cacaccatat cgtagagaag cacgcccagc gaccacacgg 1260 tggccgagcg cccgtggtag cggtggtagc ggatccactc cggggggctg tacactcggg 1320 tgccgtcgaa gtcggtgtag accgtgtcct tgagcagcgc acccgaaccg aagtcgatga 1380 gcttgagctc tccggagcgc aggtccacaa gcagattttc gtccttaatg tcgcggtgca 1440 cgaccccgca gctgtggcag tggcgcacgg cggccagcac ctgcgcgaag aaagcggcgc 1500 gccagcggct cgtccagggc gccgcgctcc gtgataaagt cgaagatggt cctagcgccg 1560 getegggeeg etecageace ageaggaage egtegggeeg etegaaceag tecageagge 1620 ggatgacgcc gcgcgccgc cccggcgcgc ccaccttgcg cagcagc 1667

```
<210> 3631
<211> 1468
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1468)...(1055)
<223> similar to gi1899194 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters

<400> 3631
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```
<210> 3632
<211> 5979
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(5098)
<223> similar to gi2887421 in the genepept database release 114,
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<210> 3633

<211> 5539

<212> DNA

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<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(3951)

<223> similar to gi4589670 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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cttttactcc attcccagat tagttatgca aaattcaact gcgttctact tttagaagtg
                                                                     4620
tttagggtct ttattttctg ttgacccttc atctgaaaga ttctcttccc ttgttaggta
                                                                     4680
caatcactgc cccccgctt ttttttttga gatggggtct tgctatgttg cccaggctgg
                                                                     4740
ttttaaacgc ctgggctcaa gcaaccctcc cgcctccctg ctgagattac aggtgtaagc
                                                                     4800
caccataccg caacctcaat gacacctttc tgatggtctt tacacagtct gtgatgtctg
                                                                     4860
gtggcccccc tgccctggac tcaataattg atagattttc ctagagtaac agtatgagag
                                                                     4920
ctccagccat tccattaaaa gtattagttc tgctttgagc tgaaaccagt tgagcctaat
                                                                     4980
ggaagactgg atgtctttct tcttcatcca agcaccctaa tgactgttta gttacatcca
                                                                     5040
tagatgcaga caacataaca cctgtgactt acttgaattg ggataagcca ttccagaagt
                                                                     5100
agettateet agaettggaa ataagatttt ttteaceact aaetteeatg etteagagat
                                                                     5160
gacattcaaa gccagattcc caagtgcctg atcatacctc ccagtctcag gaagatattt
                                                                     5220
gcttacccct tagaccaaga atcttaagat cttccccagc tatgaagcct atcttggaat
                                                                     5280
gggaaaccat gaaatttgtc ttttaaaaga aagggaagaa atagccttac agcccctgtt
                                                                     5340
cctccaagtg cacatttagc cttaaaatcc tgggagtcgg gagacaccgt ggagtcctaa
                                                                     5400
catccacagt gtctgctggt cgtggtcaga aggcagtaat gcaagagtcc ttttggtgaa
                                                                     5460
gaagtgtttc tatgtaagag atgtttatat ttaagtagtt cttttataaa taaaagcatt
                                                                     5520
tctaatggca aaaaaaaa
                                                                     5539
```

<210> 3634

<211> 714

<212> DNA

<213> Homo sapiens

```
<220>
     <221> misc_feature
     <222> (23)...(585)
     <223> similar to gi2058378 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3634
tccgcgcggg cttcggagga gcccgccctg ccagaggaga gggaggtcac ggcgtaaagg
                                                                     60
tgcagctgcc gccaccgccg cttctgcaag gtctcaggga cgggctgcag ccatqtccta
                                                                    120
ttgccggcag gaagggaagg atcgaatcat atttgtaacc aaagaagatc atgaaactcc
                                                                    180
aagcagtgca gaattggtgg ctgatgaccc caacgatcca tacgaggagc atggattgat
                                                                    240
actgccaaat ggaaacatta actggaactg cccatgcctt gggggaatgg ccagcggtcc
                                                                    300
ctgtggagaa cagtttaagt cagccttttc ctgcttccac tatagcacgg aggagatcaa
                                                                    360
ggggtcagac tgtgtagacc agttccgggc catqcaggaa tgcatgcaga aatacccaga
                                                                    420
cctctatccc caagaggatg aggatgagga agaggaaaga gagaagaagc cagcagaaca
                                                                    480
agcagaagaa acagctccca ttgaggccac tgcaaccaaa gaagaggagg gatcaagtta
                                                                    540
atgaaggcca caaggcactg ggcaccagtc cttttggagt ggaccttttg caaaaggcct
                                                                    600
tgtcatcacc ttccaagaaa gtttccttct gttgtcctgt gcattataat atacaaaata
                                                                    660
acttattttg atgatcagag gtcttgaggt cttgacctct tgacatatac actq
                                                                    714
     <210> 3635
     <211> 1258
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (42)...(287)
     <223> similar to gi1872200 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3635
atggaaaact gtgcaactgc aggtaccacc cacgagtccg cgatcttggc tcaccgcaac
                                                                     60
ctccgccttc tggattccag caattctgcc tcagcctccc gagtagctgg gactgcaggc
                                                                    120
gcgtgccacc acacccggtt aattttttgt attttttggt agatacgggg tttcgccatg
                                                                    180
tcggccaggc tggtctcgaa ctcctgacct cgtgatctgc ctgcctcagc ctcccaaagt
                                                                    240
gctgggatta caggcttgag ctcctgcgcc cagcccatgc taagtctttt acccagtggt
                                                                    300
caaaactggc acaacacagg atttatactg gagagcaacc tcacaaatgt aatgaaagtg
                                                                    360
gtaaggettt ttatcaaatg teettgtett tggggteatg agaaaattea tacagaatet
                                                                    420
480
gttttttaaa tgaactccca taagagtcta cacaccatag aactcatacc aggaatcaca
                                                                    540
aagtctctaa atttccaaag ttaactggaa atattacaaa ctgcagaata attccaggcc
                                                                    600
aaaatatgtt aaattcataa catgatgtat atcaaaggaa aaaaggacat gtggaaatga
                                                                    660
cacattatct tcagtgtata aaatattcat ttatgtgaag tttcttggaa aggctacact
                                                                    720
actattactg gtttccgtct gatgtttgag atctgttgat tttatgcttt tcttacaggc
                                                                    780
ctttcattat gatctttggg aaggaatcaa taaaatgata gggcctactt cattaggtgt
                                                                    840
```

```
<210> 3636
<211> 2549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1864)
<223> similar to gi4731910 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3636 atggatgatc agcaagcttt gaactcaatc atgcaagatt tggctgtcct tcataaggcc 60 agtcgaccag cattatcctt gcaggaaacc agaaaagcaa aatcttcatc accaaaaaa 120 cagaatgatg tccgagtcaa atttgaacat agaggagaaa aaagaatcct tcagttcccc 180 agaccagtta aactggaaga tctgagatct aaagctaaaa ttgcctttgg acagtctatg 240 gatctacatt ataccaataa cgagttggta attccattaa ctactcaaga tgacttggac 300 aaagctctgg aactgctgga tcgtagtatt catatgaaga gcctcaagat attacttgta 360 ataaatggaa gtacacaggc tactaattta gaaccattgc catcactaga agatttggat 420 aatacagtat ttggagcaga gaggaaaaaa cggctatcta taataggtcc tactagtaga 480 gatagaagtt ctcctcccc gggttacatt ccagatgaat tacaccaggt tgcccggaat 540 gggtcattca ctagtatcaa cagtgaagga gagttcattc cagagagcat tggaaccaaa 600 tgctggatcc aattatcttt aagcagccct gaaaattctg gctcaggaag ttgtccatca 660 cttgatagtc ctttggatgg agagagctat ccaaaatcac qaatqcctag qqctcagagc 720 tacccagata atcatcagga attttcagac tatgataacc ctatctttga gaaatttgga 780 aaaggaggaa catatccaag aaggtatcat gtttcatatc atcatcaaga gtattatgat 840 ggtcgtaaaa cttttccaag agctagaagg acccagggga accagcttac ggtctcctgt 900 gagtttcagt cctactgatc attccttaag cactagtagt ggaagcagta tctttacccc 960 agagtatgat gatagtcgaa taagaagaag gggaagtgac atagacaatc ctactttgac 1020 cgtaatggac atcagcccac ccagccgttc acctcgagct ccgaccaact ggagattggg 1080 caaactgctt ggccaaggag cctttggaag ggtctacctc tgttatgatg ttgatacagg 1140 aagagaattg gctgttaagc aagttcaatt tgaccccgat agtcctgaga ccagcaagga 1200 agtaaatgca cttgagtgtg aaattcagtt gctgaaaaac ttgctacatg agcgaattgt 1260 tcagtattat ggctgtttga gggatcccca ggaaaaaaca ctttccatat ttatggaata 1320 tatgccaggg ggttcaatta aggaccaatt aaaagcatat ggcgctctta ctgagaatgt 1380 gactaggaaa tacacccgtc agattctgga gggtgtccat tatttgcaca gtaatatgat 1440 tgtccataga gatatcaaag gcgcaaatat cctgcgagat tcaacaggca acgtcaaact 1500 aggagatttt ggggccagca aacggcttca gaccatctgt ctctcaggga caggaatgaa 1560 gtctgtcacg ggcacaccat actggatgag ccctgaagtc atcagtggag aaggctatgg 1620 aagaaaagca gacatctgga gtgttgcatg tactgtggta gaaatgctaa ctgaaaagcc 1680 gccttgggct gaatttgaag caatggctgc catctttaaa atcgccactc agccaacaaa 1740 cccaaagctg ccacctcatg tctcagacta tactcgagat ttcctcaaac ggatttttgt 1800

```
agaggccaaa ctgagacctt cagctgatga actcttaagg cacatgtttg tgcattatca
                                                               1860
ctagcagcca gtaacctctc ctgtgcctct acctagctcc catctattca ttcaccttct
                                                               1920
ctctgactgc acttttcttt tttataaaaa aagagagatg ggggagaaaa aagacaagag
                                                               1980
qqaaaqtatt tctcttgatt cttggttaaa tttgtttaat aataataata tcctaaattt
                                                               2040
tttatattta atctttttt cccttacaag aacttgaagt ttttttttt aattttata
                                                               2100
atgtactgat ggggttcaaa aagataaagc actttagtac atagtcactc tttttagtac
                                                               2160
aaacaaatca tttggaatac ctaaagattg tagagtcatt ccctctatca ctgacacatc
                                                               2220
agtgacgatg ggaagacatg gaaaacaagg agaagaaaat gatgtataat ttgtagtttt
                                                               2280
2340
ggtaggtact caacttaaag aatataggtt tcttcttata tctgtattct ttagatccta
                                                               2400
acctctgtct accaaccttt ttgctcagta ggagtcttga tagaagatat gaatctctga
                                                               2460
gaggtatgtt tatttgttaa tcctaaccag tataataagc aaatacacta taatagatcc
                                                               2520
acgttactgg aatctgtaaa ccttgaggg
                                                               2549
```

```
<210> 3637
     <211> 415
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (2)...(188)
    <223> similar to gi5726234 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 3637
gctgagcttt tgctcgccgt ccaccactgc tgtttgtcgc tgtcgcagac ccgctgctga
                                                                       60
ctgccatccg tctggatccg gcagggtgtc cactgtgctc ctgatccaat gaggcaccca
                                                                      120
ttgccgctcc cgatccggct aaaggcttgc cattgttcct gcacagctag gtgcccgggt
                                                                      180
ttgtcctaat ccagctgaac gctagtcact gggttccacg gttctcttcc gtgatccacg
                                                                      240
gcttctaata gagcgataac actcaccaca tggcccaaga ttccattcct tggaatccat
                                                                      300
gaggccaaga accccaggtc agagaacaca aggcttgcca ccatcttgga agcggccggc
                                                                      360
caccatcttg ggagetetgg gageaaggae eeceegaeee aataagagtt tegea
                                                                      415
```

```
<210> 3638
<211> 2473
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (34)...(62)
<223> similar to gi4240315 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3638
acgcgccctg aattcccggg tcgacgggag gcaggagact gtaatggacg gggatggggg
                                                                       60
tccccaggac ggcctaagaa gaagcacaca ggcatggcca gcattgacag cagtgccct
                                                                      120
gaaacaacat cggatagttc ccccacctta agccggagac cacttcgagg gggctgggcc
                                                                      180
cccacctcct ggggtcgagg tcaggacagt gacagcatta gcagctcttc ttcggactcc
                                                                      240
ctgggctcct catcctccag tggaagtcgc cgggccagtg ccagtggagg agcccgggcg
                                                                      300
aagactgttg aagttggcag gtacaagggc cgccgccccg agagtcatgc ccctcatgta
                                                                      360
cccaatcagc catcagaggc agctgcacac ttctacttcg agctggcgaa gacagtgctg
                                                                      420
atcaaggcag ggggcaacag cagcacttcc attttcacac atccatcttc ctcagggggc
                                                                      480
caccagggtc ctcaccgcaa cctgcacctt tgcgccttcg agattgggct ttatgccctt
                                                                      540
ggcctgcaca actttgtttc tcccaactgg ctctcacgta cttattcttc ccacgtttcc
                                                                      600
tggattacag gccaggccat ggagataggc agcgcagccc tgactatact ggtagaatgc
                                                                      660
tgggatgggc acctgacacc ccctgaggtt gcatccctgg ctgacagggc atcacgggca
                                                                      720
agagactcca atatggtgag ggcggcagca gagctggccc tgagctgcct gcctcacgcc
                                                                      780
catgcattga accctaatga gatccagcgg gccctggtgc agtgcaagga acaggacaac
                                                                      840
ctgatgttgg agaaggcctg catggcagtg gaagaggcag ctaagggtgg gggcgtgtac
                                                                      900
cctgaagtgt tgtttgaggt tgctcaccag tggttctggc tatatgagca aactgcaggt
                                                                      960
ggctcatcca cagcccgtga aggggctaca agctgtagtg ccagtgggat cagggcaggt
                                                                     1020
ggggaagctg ggcggggtat gcctgagggt agagggggcc cagggactga gccggttaca
                                                                     1080
gtggcagcgg cagcagtgac agcagcagcc acagtggtgc ccgtcatatc ggtggggtct
                                                                     1140
agtttatacc caggtccagg actggggcat ggccactccc ctggcctgca cccctacact
                                                                     1200
getetacage eccaectgee etgtageeet cagtatetea etcaeccage teaecetgee
                                                                     1260
caccccatge etcacatgee eeggeetgee gtetteeetg tgeecagete tgeataceca
                                                                     1320
cagggtgtgc atcctgcatt cctaggggct cagtaccctt attcagtgac tcctcctca
                                                                     1380
cttgctgcca ctgctgtgtc tttccccgtt ccttccatgg cacccatcac agtacatccc
                                                                     1440
taccacacag agccagggct tccactgccc accagtgtgg cctgtgagtt gtggggccag
                                                                     1500
ggaacagtga gcagtgtcca tccagcatcc acgtttccag ccatccaagg tgcctcactg
                                                                     1560
cctgccctga ccacacagcc cagccctctg gtgagcggag gttttccacc gcccgaggag
                                                                     1620
gagacacaca gtcagccagt caatccccac agcctgcacc acctgcatgc tgcctaccgt
                                                                     1680
gtcggaatgc tggcactgga gatgctgggt cgccgggcac acaacgatca ccccaacaac
                                                                     1740
ttctcccgct cccccccta cactgatgat gtcaaatggt tgctggggct ggcagcaaag
                                                                     1800
ctgggagtga actacgtgca ccagttctgt gtgggggcag ccaagggggt gctgagcccg
                                                                     1860
tttgtgctgc aggagatcgt catggagacg ctgcagcggc tgagtcccgc tcatgcccac
                                                                     1920
aaccacctgc gtgccccggc cttccaccaa ctggtgcagc gctgccagca ggcatacatg
                                                                     1980
cagtacatcc accaccgctt gattcacctg actcctgcgg actacgacga ctttgtgaat
                                                                     2040
gcgatccgga gtgcccgcag cgccttctgc ctgacgccca tgggcatqat qcaqttcaac
                                                                     2100
gacatectae agaaceteaa gogeageaaa eagaeeaagg agetgtggea gegggtetea
                                                                     2160
ctcgagatgg ccaccttctc cccctgagtc tttcaccctt agggtcctat acagggaccc
                                                                     2220
aggcctgtgg ctatgggggc ccctcacaca gggggagtga aacttggctg gacagatcat
                                                                     2280
cctcactcag ttccctggta gcacagactg acagctgctc ttgggctata gcttggggcc
                                                                     2340
aagatgtctc acaccctaga agcctagggc tggggggagac agccctgtct gggagggggc
                                                                     2400
gttgggtggc ctctggtatt tatttggcat ttataaatat ataaactcct tttttactct
                                                                     2460
agtaaaaaaa aaa
                                                                     2473
```

```
<210> 3639
<211> 2087
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (37)...(1787) <223> similar to gi1769467 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3639
cagtcattgt ccaaacctgc ttttttccga caaaattcag agaggaggaa cttcaagctg
                                                                       60
ctggacacta ggaagctgag tcgggatgga actgggtccc cttccaaaat cagcctccc
                                                                      120
tecaetecea geageeetga tgacatttte tttaacettg gagacecaea gaacqqeaqq
                                                                     180
aagaagagaa agatacccaa gctggtgttg cgaatcaacg ccatttatga ggtccggaga
                                                                      240
ggaaagaaac gggtgaagag gctgtcccag tcaatggaga gcaactcagg aaaagtgaca
                                                                      300
gatgagaaca gtgagtctga cagtgacaca gaggagaagc tgaaagctca cagccagcqc
                                                                     360
ctggtcaacg tgaagtcccg gctgaagcag gcgcctcggt acccatcact tgcccgggaa
                                                                      420
ctcatcgagt accaggagag gcagctcttc gagtactttg tggttgtgtc tttqcacaag
                                                                      480
aagcaggccg gggctgccta cgtgccaaaa ctcacccaac agttccctct gaagttggaa
                                                                     540
aggtctttca agttcatgag agaagctgag gaccaactga aggccattcc ccagttctgt
                                                                     600
tttcccgatg ccaaggattg ggttcctgtc cagcagttca ccagtgaaac attctcgttt
                                                                      660
gtcttaactg gagaagatgg gagcagaagg ttcggttact gccgaagact gctgcctgga
                                                                     720
ggcaaaggga agcgccttcc tgaagtttac tgcattgtga gccgcctggg atgcttcagc
                                                                     780
ctcttttcaa ggatcttgga tgaggtggaa aaaagacgag gcatctctcc tgccctggtt
                                                                     840
cagccactca tgagaagtgt catggaagcc cctttcccag ccctgggcaa aaccatcctt
                                                                     900
gtcaagaact teetgeeagg tteaggaact gaggtgateg aactgtgeeg eeegetggae
                                                                     960
tcccggctcg agcacgtgga ctttgagtct ctcttctcct ccctcagcgt ccgccacctg
                                                                    1020
gtctgtgtgt ttgcctccct gcttctggag aggagggtca tcttcattgc agacaagctc
                                                                    1080
agcatcctgt ccaagtgctg ccacgcgatg gtggcgctga tctacccctt cqcctqqcaq
                                                                    1140
cacacctaca teceggtget gecaceegee atggtegaca tegtgtgete gecgaegeee
                                                                    1200
ttcctcatcg ggctgctctc cagctcgctg ccactgctca gggagctgcc gctggaagag
                                                                    1260
gtccttgtgg ttgacctcgt caacagccgg ttcctcagac agatggacga tgaggactcc
                                                                    1320
atcctgcccc ggaagcttca ggtggccctg gaacacattc tggaacagag gaacgagctg
                                                                    1380
gcttgtgagc aggacgaagg gcccctagac ggcaggcacg gtccagagtc cagcccttg
                                                                    1440
aacgaggtgg tgtctgaagc ctttgtccgc ttcttcgtgg agattgtggg acactactct
                                                                    1500
ttqttcctga cgtcgggcga gcgtgaggag agaaccctgc agcgggaggc cttccgcaaa
                                                                    1560
gctgtctcct ccaagagcct ccgccacttc ctcggaggtc ttcatggaga ctcagatgtt
                                                                    1620
tcggggcttc atccaaggag cgggagctgc gccggcagga tgccaaaggt ctgtttgagg
                                                                    1680
tccgagccca agagtatctg gaaacactcc ccagtggaga gcacagcggt gtcaataagt
                                                                    1740
tcctgaaggg actaggcaat aaaatgaaat ttctccacaa gaaataactc tcagcctcaa
                                                                    1800
gggaaaactt cctcctagtg cagccctatt ctttaaaaac agttcctggt ggcctttctg
                                                                    1860
aaaggctggg tcccaggttg tcacggtgcg gaactggagg ccgcggtggc ttctggccga
                                                                    1920
ggctgggctc ttccctggat gaggacctgg gagccgcctg ggaggacagc cccagaaagg
                                                                    1980
qaqcccqaqa ccaggcgtgt cgccgacatg caaatgggtt gttttggtgg ttgagagttt
                                                                    2040
tttttttat cttagatatt aaaagtaaga aaaatgaaaa aaaaaaa
                                                                    2087
```

```
<210> 3640
<211> 998
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (907)...(550)
<223> similar to gi3925685 in the genepept database release 114,
```

```
<400> 3640
ttttttttt ttaccaatgg aatagcagac tttctgccag attttattgg ttaatggtaa
                                                                     60
tataaaatat aagaaaaaaa caacttcaaa agagtcaaca atctgtatcc atctacatgg
                                                                    120
tatctgacca ccattactgg gcttttgaag tacctcgtag tggacttcac aaatgattct
                                                                    180
taatttttaa aaatgcaaag tgtcttagta tttgtgtatg acatttaaac tcagaattta
                                                                    240
cgtagtatag aaaaatactc accaaaatat ttataagcca cacacttaaa atgcattgaa
                                                                    300
360
aaaaaaataaa gtatattgat tgttctttac acattttgat tacactgaat ttgttaattt
                                                                    420
aatattagtt caaataaaca ttgttattta aaaaatgctg agtacacgat taagctgaat
                                                                    480
tttgttttcc atcagaaaaa gaacttcagg agtatataat ggtctacagg tgcttcccat
                                                                    540
ccaaaacact aggtcttcat cttttgtttc ttagaccact caggtgcttc ttttttagta
                                                                    600
aagagtgttg gtttaggtgt aaatatattg tetteatget etttaggeae atteaaagte
                                                                    660
tttgatttct gattttctgt cacatgtttt ggttctgttt tagtgagaag taagctgttc
                                                                    720
tcagaatgtt tactatgcat cttaacgaga atctgtttca ttgctgccaa ttcctgacat
                                                                    780
ctttctcaag ttgtgcaata gattccgtca gtgaatcaat cttagaatct ctctgacgca
                                                                    840
ctgattcaat gagatacctg taaggctgtt gagtctggtt taatagcgaa ttggctctgt
                                                                    900
caagctatgt ctgttgtatc tgtatggtgc aaacattaag tactggtatg ctgctgacaa
                                                                    960
tctttactcc atcttcagta accttaggtt ggtagttt
                                                                    998
    <210> 3641
    <211> 3325
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (137)...(1982)
    <223> similar to gi4176525 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3641
ctgagtcgcc tgcaggcagc gtgccaccgg ctgaagctct ggccagagct gcaggacaat
                                                                     60
ggtggggact atgtctcagc tgctttgggc cccctgacca ccctcctgga gcagggcctg
                                                                    120
ggggctcggc tgaacctgct ggctcactct cgacccccag tcccagagtg ggacatcagc
                                                                    180
caagatccac caaagcacaa agactctggg accctgaccc tgggactcct tctccggcct
                                                                    240
gagggactga ccagcgtcct tgagctgggt ccagaggcag accagcctga ggctgctaaa
                                                                    300
ttccgccagt tctggggatc ccgctcggag cttcggcgtt tccaggacgg agccattcgg
                                                                    360
gaagctgtgg tctgggaggc agcctctatg tcccagaagc gccttattcc ccaccaggtg
                                                                    420
gtcacccacc tcttggcact ccatgctgac atcccagaaa cctgtgtcca ctatgtgggg
                                                                    480
ggccccctgg atgcacttat ccaaggcctg aaagagacct ccagcacagg tgaggaggcc
                                                                    540
ctggtagcgg cggtacgttg ctacgacgac ctcagtcgcc tactgtqqqq qctaqaqqqt
                                                                    600
ctcccactga ccgtgtctgc tgttcaggga gctcacccag tgctgcgcta cacagaggtg
                                                                    660
ttcccaccaa ctccagtccg tccagccttc tccttctatg agactctgcg ggagcggtcc
                                                                    720
tcactgctgc cccggctcga taagccctgt ccggcctacg tggagcccat gaccgtggtt
                                                                    780
```

840

tgtcacctgg agggcagtgg ccagtggcca caggacgctg aggccqtqca qcqqqtccqa

```
getgeettee agetgegeet ggeagagetg ttgacacaae ageatggtet geagtgeegt
                                                                      900
gccactgcca cgcacacgga tgtccttaag gatggatttg tgtttcggat tcgcgtggcc
                                                                      960
tatcagcggg agccccagat cctgaaggag gtgcagagcc cagaggggat gatctcgctg
                                                                     1020
agggacacag ctgcctccct ccgccttgag agagacacaa ggcagttgcc actqctcacc
                                                                     1080
agtgccctgc acggactgca gcagcagcac ccagccttct ctggtgtggc acggctggcc
                                                                     1140
aagcggtggg tgcgtgccca gcttcttggt gagggtttcg ctgatgagag cctggatctg
                                                                     1200
gtggccgctg cccttttcct gcaccctgag cccttcaccc ctccgagttc cccccaggtt
                                                                     1260
ggcttccttc gattcctttt cttggtatca acgtttgatt ggaagaacaa cccctcttt
                                                                     1320
gtcaacctca ataatgagct cactgtggag gagcaggtgg agatccgcag tggcttcctg
                                                                     1380
gcagctcggg cacagctccc cgtcatggtc attgttaccc cccaagaccg caaaaactct
                                                                     1440
gtgtggacac aggatggacc ctcagcccag atcctgcagc agcttgtggt cctqqcagct
                                                                     1500
gaagccctgc ccatgttaga gaagcagctc atggatcccc ggggacctgg ggacatcagg
                                                                     1560
acagtgttcc ggccgccctt ggacatttac gacgtqctga ttcgcctqtc tcctcqccat
                                                                     1620
atcccgcggc accgccaggc tgtggactcg ccagctgcct ccttctgccg gggcctgctc
                                                                     1680
agccagccgg ggccctcatc cctgatgccc gtgctgggct atqatcctcc tcagctctat
                                                                     1740
ctgacgcagc tcagggaggc ctttggggat ctggcccttt tcttctatga ccagcatggt
                                                                     1800
ggagaggtga ttggtgtcct ctggaagccc accagcttcc agccgcagcc cttcaaggcc
                                                                     1860
tccagcacaa aggggcgcat ggtgatgtct cgaggtgggg agctagtaat ggtgcccaat
                                                                     1920
gttgaagcaa tcctggagga ctttgctgtg ctgggtgaag gcctggtgca gactgtggag
                                                                     1980
gcccgaagtg agaggtggac tgtgtgatcc cagctctgga gcaagctgta gacggacagc
                                                                     2040
aggacattgg acctctagag caagatgtca gtaggatgac ctccaccctc cttqqacatg
                                                                     2100
aatcctccat ggagggcctg ctggctgaac atgctgaatc atctccaaca aaacccagcc
                                                                     2160
ccaactttct ctctgatgct ccagcattgg ggcaggggca tggtggccca tgtagtctcc
                                                                     2220
tgggcctcac catcccagaa gaggagtggg agccagctca gagaaggaac tgaacccagg
                                                                     2280
agatccatcc acctattagc cctgggcctg gacctccctg cgatttccca ctcctttctt
                                                                     2340
agtettette cagaaacaga gaaggggatg tgtgeetggg agaggetetg teteetteet
                                                                     2400
gctgccagga cctgtgccta gacttagcat gcccttcact gcagtgtcag gcctttagat
                                                                     2460
gggacccagc gaaaatgtgg cccttctgag tcacatcacc gacactgagc agtggaaagg
                                                                     2520
ggctatatgt gtatgaatag accacattga aggagcacaa tgccctcctg tgttgatgcc
                                                                     2580
acttcccagg gtggagacag tggaaaagaa ccgaggacag gaaaggattg ggtaggtgaa
                                                                     2640
ggggtcaggg gactggtagt cacccaatct tggagaggtg caaaaagcac tgggggctac
                                                                     2700
ccgttagctg catctgccct ggctgtttgc ccgttcatgt cacaaactgc cactactatg
                                                                     2760
tacctgcagt ggggttgcag agatggggga gactcaagtc ttactcccca ggagctccca
                                                                     2820
gggcccaagg aggagaatgc tgcctccttt cagtctggtc tacacccact ttctggtagc
                                                                     2880
ctctctgctt cctgtaattc tggctgtttt tccagactca gctcaaatag tgcccctcct
                                                                     2940
taagcccatc cctcgccccc agcctgaggt gatctttccc tcctctgaac tattagagca
                                                                     3000
gttactgtct gttcagttcg tttggcaggc acacacagtg gcataaattc tattgttttg
                                                                     3060
aactctgatt taaaattaaa ttgcagctgg gcgtagtggc tcatgcttgt aatcccaaca
                                                                     3120
cttagggagt caggagaatc acttgagctc aggagttcta gaccaatctg ggcaacagag
                                                                     3180
agaccccatc tcttttaaat aaaaagttaa attgcttaat ttcccccgta ttcctggcct
                                                                     3240
gtctgcccct ttcacataat tttaacctgg tttcttgtat gtaaactcct tgagggcaag
                                                                     3300
aacatgtttg aacataaaaa aaaaa
                                                                     3325
```

```
<210> 3642

<211> 1938

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1939)

<223> n = a,t,c or q
```

```
<220>
<221> misc_feature
<222> (3)...(812)
<223> similar to gi4886467 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3642
gtggaaagaa cagtcagaaa gcctctcctg tggatgatga acagctgtca gtctgtcttt
                                                                     60
ctggattcct agatgaggtt atgaagaagt atggcagttt ggttccactc agtgaaaaag
                                                                    120
aagtccttgg aagattaaaa gatgtcttta atgaagactt ttctaataga aaaccattta
                                                                    180
tcaataggga aataacaaac tatcgggcca gacatcaaaa atgtaacttc cgtatcttct
                                                                    240
ataataaaca catgctggat atggacgacc tggcgactct ggatggtcag aactggctga
                                                                    300
atgaccaggt cattaatatg tatggtgagc tgataatgga tgcagtccca gacaaagttc
                                                                    360
acttcttcaa cagctttttt catagacagc tggtaaccaa aggatataat ggagtaaaaa
                                                                    420
gatggactaa aaaggtggat ttgtttaaaa agagtcttct gttgattcct attcacctgg
                                                                    480
aagtccactg gtctctcatt actgtgacac tctctaatcg aattatttca ttttatgatt
                                                                    540
cccaaggcat tcattttaag ttttgtgtag agaatataag aaagtatttg ctgactgaag
                                                                    600
ccagagaaaa aaatagacct gaatcttcag ggttggcaga ctgctgttac gaagtgtatt
                                                                    660
ccacaacaga aaaacgacag tgactgtgga gtctttgtgc tccagtactg caagtgcctc
                                                                    720
gcccttagag cagcctttcc agttttcaca agaagacatg ccccgagtgc ggaagaggat
                                                                    780
ttacaaggag ctatgtgagt gccggctcat ggactgaaac tcagcaggga ctctgggaag
                                                                    840
tctgaccaag ttggagcaga tggtttgtta cttgaatctc caaacactta gttgaatttt
                                                                    900
960
ttgcccttaa ttccatttct cccagctacc atgtactatt gtttaatgtt cagtttggtt
                                                                   1020
tcatttttaa ttttatggtt ctgtgcgtcc cccatattta atatttatta ttcaaacgca
                                                                   1080
tgcatataga cagagcatgc agtgaagagt attaaaaaaa aaagcttagt agatttggtq
                                                                   1140
cagcttttga aacttaggtt agacgtgaaa ctgaaataca qqtttcaaat ttacttcccc
                                                                   1200
agaacctaaa aatgcaagat gtttttgata ccaaccataa cctcctgaga atagtaagtg
                                                                   1260
ttcccccggg gcattaaggg taagcctggg ggtggttttt gaccaaatcc caqtccctqt
                                                                   1320
tttaccttta cccagcggca actttcaccc aacttcccct ctcccaagtg agtcttagag
                                                                   1380
agtgcagtcc cattcctttt tgaagggtga gatggaagtg gtcgtaaact gactggtgtc
                                                                   1440
ttctgtttct gggaggcaca cttgtaaggc acagtggctg ctttgggagg agtaaggtgt
                                                                   1500
gagaaaaagc aaccttggag gccagtaaca atgacagatt tcaatcgtgg ttttaggaat
                                                                   1560
tataatacgt ggcatacatc tcataaaggc ttttgctggg atattgaatt ccctgaattt
                                                                   1620
ttctgttttc gacctgttaa aaaaatctta acatccatca aactagtggt caaacaaatg
                                                                   1680
agaatgcagc tgttctcaga gtaattttta agttgtcatt tccctgtgtt qcctcccaat
                                                                   1740
tggaagaagt taaggtttac caaatgcatt tctatttcaa gggtatctga aacgtaaaca
                                                                   1800
ttcaaaactg aaggctgact gacttnagat gttttgcagg tggctggaga gaacagggaa
                                                                   1860
ggtaatagag acacacttag tcccatggga agcgcagcac cgttgtaggt tctttctcct
                                                                   1920
gtcccattag cgacctca
                                                                   1938
```

```
<210> 3643
<211> 3654
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(2333)
<223> similar to gi2827198 in the genepept database release 114,
```

<400> 3643 cagacactga aatctgatgt tttgttggga actgctgcat tagatattta tgaaacatta 60 aagtcaaaca atatgaaact tgaagaagta gttgtgactt tgcagcttgg aggtgacaaa 120 gagccaacag agacaatagg agacttgtca atttgtcttg atgggctaca gttagagtct 180 gaagttgtta ccaatggtga aactacatgt tcagaaagtg cttctcagaa tgatgatggc 240 tccagatcca aggatgaaac aagagtgagc acaaatggat cagatgaccc tgaagatgca 300 ggagctggtg aaaataggag agtcagtggg aataattctc catcactctc aaatggtggt 360 tttaaacctt ctagacctcc aagaccttca cgaccaccac cacccacccc acgtagacca 420 gcatctgtca atggttcacc atctgccact tctgaaagtg atgggtctag tacaggctct 480 ctgccgccga caaatacaaa tacaaataca tctgaaggag caacatctgg attaataatt 540 cctcttacta tatctggagg ctcaggccct aggccattaa atcctgtaac tcaagctccc 600 ttgccacctg gttgggagca gagattgac cagcacgggc gagtttacta tgtagatcat 660 gttgagaaaa gaacaacatg ggatagacca gaacctctac ctcctqqctq qqaacqqcqq 720 gttgacaaca tgggacgtat ttattatgtt gaccatttca caagaacaac aacgtggcag 780 aggccaacac tggaatccgt ccggaactat gaacaatggc agctacagcg tagtcagctt 840 caaggagcaa tgcagcagtt taaccagaga ttcatttatg ggaatcaaga tttatttgct 900 acatcacaaa gtaaagaatt tgatcctctt ggtccattgc cacctggatg ggagaagaga 960 acagacagca atggcagagt atatttcgtc aaccacaaca cacgaattac acaatgggaa 1020 gaccccagaa gtcaaggtca attaaatgaa aagcccttac ctgaaggttg ggaaatgaga 1080 ttcacagtgg atggaattcc atattttgtg gaccacaata gaagaactac cacctatata 1140 gatococgca caggaaaato tgooctagac aatggacoto agatagoota tgttogggac 1200 ttcaaagcaa aggttcagta tttccggttc tggtgtcagc aactggccat gccacagcac 1260 ataaagatta cagtgacaag aaaaacattg tttcgaggat tcctttcaac agataatgag 1320 cttcagtccc caagatctgc gaagacgttt gtgggtgatt tttccaggag aagaaggttt 1380 agattatgga ggtgtagcaa gagaatggtt ttttcttttq tcacatgaaq tqttqaaccc 1440 aatgtattgc ctgtttgaat atgcagggaa ggataactac tgcttgcaga taaaccccgc 1500 ttcttacatc aatccagatc acctgaaata ttttcgtttt attggcagat ttattgccat 1560 ggctctgttc catgggaaat tcatagacac gggtttttct ttaccattct ataagcgtat 1620 cttgaacaaa ccagttggac tcaaggattt agaatctatt gatccagaat tttacaattc 1680 tctcatctgg gttaaggaaa acaatattga ggaatgtgat ttggaaatgt acttctccgt 1740 tgacaaagaa attctaggtg aaattaagag tcatgatctg aaacctaatg gtggcaatat 1800 tcttgtaaca gaagaaaata aagaggaata catcagaatg gtagctgagt ggaggttgtc 1860 tcgaggtgtt gaagaacaga cacaagcttt ctttgaaggc tttaatgaaa ttcttcccca 1920 gcaatatttg caatactttg atgcaaagga attagaggtc cttttatgtg qaatgcaaga 1980 gattgatttg aatgactggc aaagacatgc catctaccgt cattatgcaa ggaccagcaa 2040 acaaatcatg tggttttggc agtttgttaa agaaattgat aatgagaaga gaatgagact 2100 tctgcagttt gttactggaa cctgccgatt gccagtagga ggatttgctg atctcatggg 2160 gagcaatgga ccacagaaat tctgcattga aaaagttggg aaagaaaatt ggctacccag 2220 aagtcatacc tgttttaatc gcctggacct gccaccatac aagagctatg agcaactgaa 2280 ggaaaagctg ttgtttgcca tagaagaaac agaaggattt ggacaagagt aacttctgag 2340 aacttgcacc atgaatgggc aagaacttat ttgcaatgtt tgtccttctc tgcctgttgc 2400 acatcttgta aaattggaca atggctcttt agagagttat ctgagtgtaa gtaaattaat 2460 gttctcattt agatttatct cccagtgatt tctactcagc gtttccagaa atcaggtctg 2520 caaatgacta gtcagaacct tgcttaacat gagattttaa cacaacaatg aaatttgcct 2580 tgtcttattc cactagttta ttcctttaac aacaatattt tatgtgtgtc aaaagtctca 2640 cttgggagta gtgtttttt cttttagaca ttctgcagac atgcagggaa gtcctttggt 2700 aactgcaata tacaagattt tcctattaag cctcttggta agaggcattt gttaaaagtg 2760 caagettact cetgettetg gggatgtgag caaaattegg gettgtgtte teeeteteat 2820 tttagtctga cttgactatt gtttttcctt tctggcgcat gaatccatac atcattcctg 2880 gaagtgaggc aagactcttg catctctaca aagtagtttt gtcaatttga attcagggaa 2940 aagttggtca cagcctgcaa atgacttcat ttgqaagtct gattgtttca gttgcctgac 3000 aaatactaca ctttacaaac aatgttaaca ctgtgattcc ttcattgttt taagaagtta 3060

```
acctagggcc gggcatggtg gctcatacct gtaatcctag cactctggga ggccgaggca
                                                                     3120
ggaggatccc tttagcccag gagttaaaga ccagcctggg caacataggg agaccctgtc
                                                                     3180
ttttttttt ggcagcgtgg tgggggataa ataaataaaa ggaaaaaaaa cttagcctag
                                                                     3240
aattagaatt aatttaattg aattcatcta aagatgtctc tggtgatttt tatatgttcc
                                                                     3300
gctatataat tgatgcttta tagttttatc ataatccaac aacttcagtt atatttaatt
                                                                     3360
attgttaagg agtttaagac tagaaagact agagtgcttt ctagtccaaa tagaggtcag
                                                                     3420
tgaaacagct tttgacatca gattttcatt tgagagggag agctgtggta ctggctaaaa
                                                                    3480
agaaaggaag ataacatcca gtaaccacag gaatatattc tctqtqaatt aaaaqtcttc
                                                                    3540
aaagttatca tttctctgac atatgttgga gtagtcattt ccattcttta cattgtcatg
                                                                    3600
aactggattg ataaccctca tctgcaatat tttcacccct aaaattttta acag
                                                                    3654
```

```
<210> 3644

<211> 1345

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1230)...(422)

<223> similar to gi3114818 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3644
ttttttttt ttccaatctt cattctcggg gttggcccgc cccgatagtc actccatgtc
                                                                       60
ctcgtttact ggttcatctt cgtaatctct gtcatggtca aaatctggac tgtggttggc
                                                                      120
tgttgtcact aaggacaggg gcccttcagc ttcctctgga tcgaggggct cttctttgac
                                                                      180
gtgtacagga tgcacggctt qcataggaga tctqcctqqa ctqctqtcac tctcqttqct
                                                                      240
gttggtatgc tccattgccc cgttcagctc ttcccgtatt gcgctggcta agttgcccag
                                                                      300
agtgggattt cccatggaag cggtagtgta tagaggtata ctattctcag ccattgaagc
                                                                      360
ctgtaaagct gcattgagag gtgtgcagta ggcgtggctg ctctgcatgt ttttaataag
                                                                      420
ggaagggtta ccactgatct tttgtggcct tcgtttttgg aattctactt catccactgt
                                                                      480
ccatactgcc cctttaacgt tttctactcg cacaaaacac ttgtgaagac taagattatg
                                                                      540
acgcactgca ttcttccacg tggccgcgtt gcgtcggaag taagcaaaca ttcgtgtgaa
                                                                      600
ccagttatag atctcattta gtgttagctg cttttctgga gattcgagaa tggcctqcct
                                                                      660
aattaaagat gcatatgtaa atggtggtct aacttctgcg ttcttataaa attcttggtt
                                                                      720
ctgcgcaata tctgctgacg aaatgggcac gttgtatttg tctgagtacc gcctgcggat
                                                                      780
gggtcccccc gtgtgcatgc tggtggttgt gatgacaqag gggccttggg tqacqqqaqt
                                                                      840
caggggggcg gttggggtcg ttggagtatg aggtaagctc tgtggagaag cctccqatqc
                                                                      900
ggacttggag agagtgacac ttgataccag attcaagggc tgaggggcgg ctttgggttc
                                                                      960
tgtagacttc acatgcaggt gggtcatcat ggcttgcagg cgttctttgt cttttgcaag
                                                                     1020
ctgtagctct aactgctgta caacctgcat ttgtactcta cattgggctg tacttctatc
                                                                     1080
gtccagcgca tgctcactgt tgagatgttt tagaaatgat tggaaatctt cgcacactgc
                                                                     1140
ttcacageet ggecaettge atacaceatg tecatagaga ggatggetat gggagtgete
                                                                     1200
ctcatgggac aaactttccc ttttgggagt gtggactgag agctgtccat tggtagaggc
                                                                     1260
atgtgggttc attattaagg aggtcttgga aggtgcagag gaggagacac atgtcgtggt
                                                                     1320
cagatccaaa ctgctgtgat tgttg
                                                                     1345
```

```
<210> 3645
     <211> 1283
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1284)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (1225)...(762)
     <223> similar to gi5107820 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3645
gatttcagtt gcctgaaagc tgtaagtctg cttttttaaa agagaaattg gagttaagca
                                                                       60
gacttttcat tttttgatca tgaccctgga aagagaaata tatttgacat caaaactcag
                                                                      120
cacatatcct tggtctatat atacacatga aagtttcata aaacaataca ctgatatttt
                                                                      180
ccatgctgta ttctatttca ttttttaaaa tgctggttgt atcccattaa actggtttca
                                                                      240
aaataaatat aacatgtaca caacaacaac aaaaaaaaac actgggttag agggccagta
                                                                      300
agctcagcga gtatcagcaa ctgagacttc atccttgtct cacaaggact aaaaagagaa
                                                                      360
taatgttctc attatgtggt tcaatgccac acccatgtat ctgagatata catgtcacaa
                                                                      420
tctgggagaa gcctgtcctc aatttacttt aaatacccaa ttctgcctag aacatgaatt
                                                                      480
agacacatag taagctcttg agtgaagtgc agatgataat gacacgatca cataccactt
                                                                      540
aaaaatatet taacaeettt aettagatet cateteatae ttgtageatt tetteaaatt
                                                                      600
tactttgaaa aaagagcttc actgtgtgtg gttgtcatac acattcttct acccaaccat
                                                                      660
ggacctcttt tttcctctca ggcgcacttc atctaatttt tttagcactg gcctggcctt
                                                                      720
tttggaggag gtggagtagc tcttcagaaa ggcttcaaac acagtttcag tgttgggatg
                                                                      780
ggtactgagg aaggcettet ccaggacata gaggtetact ccettateet etggaagtge
                                                                      840
tgaaatgaaa ctcagcccaa agtctatgag cacaatgttc agctgttcca gggggggttt
                                                                      900
caggagcatg ttggaggtgg tgagatcacc atgaatgagg tcttcatcgt gcattcgagc
                                                                      960
caaaacctgc ccaattgtct tggctaagtt ggagagaccc tggggagttt ttttcagtct
                                                                     1020
ccatagtgga ctgaatataa tctcgaacag tcactgagcc ttcaatttct tccatatata
                                                                     1080
agcagttgga agcatagtcc acaaaaaga caactggggc agatattcca gcgcggcgac
                                                                     1140
ageggaggag egecegggee teetgeaceg teegeegtet gecaageege geeteeageg
                                                                     1200
ccgggtgccg gtagccttgg gaagcggtgc ttnnttncnn ggccttgcta gcccctggc
                                                                     1260
tcattnnccc cggcccggtc tcc
                                                                     1283
     <210> 3646
     <211> 1584
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1585)...(603)
```

<223> similar to gi206297 in the genepept database release 114,

```
<400> 3646
ttttttttt ttggatttaa aaacacttta tagtgtgttg tttttattga gcgctcacac
                                                                       60
ccgaaggggt ggcggcggat gctgtgggtg agtggggccg cctgagcctg ctcgggccac
                                                                      120
atccacacat ccacagagtc cacctggact cgqaqqaaqq ccqaqaqqac acgqacqqtq
                                                                      180
gccacaccca cgctgcagtg aaggcccaag tgtgatggca gagaaagagg gaaagttgga
                                                                      240
gaaagagcgg tatctgacaa taacttttct cttggatgtt aattttttgg tctataaatt
                                                                      300
ggaaaggaag gctcggactg aaataaatac atttattctg agtaatgacc ttttgggagc
                                                                      360
agtgtccgtc aactctgctt cgagagcgtc tccacgtqaq gcagcaqcqc ctqtctcqcq
                                                                      420
cctcgccgag gcggaaccac accgggcctc cagcggaggc ggctttctcc tgtgtctgtg
                                                                      480
aagggaagta gcaggtgtgt cactgttctt aatggagcgg acaatgatgc cttttctctg
                                                                      540
acagaaaaat gtccggctta actatgcaag acaagacttg gtcgtcacgt tcgcgtctct
                                                                      600
agttgatttt gtcctggaat atgtacaagt tattggtggc agccacggca atgacattgt
                                                                      660
ccacggggtg ccaggctgtg tgcaggatct tcttqttqaa qtccaqactg tccacactga
                                                                     720
tetegtettt ceteegetta ceeceegtae acacetteeg gggtttgagg etggegege
                                                                     780
gtttgctgct ctctctcgag gcctccaqqq tcacatccct ccqcqtqtct ctatcaaaca
                                                                     840
tcctgaagaa gttgttatag gacccggtca tgatggcgct atccgaaccg ttccaqcaac
                                                                     900
actcaaactt gtcaaagatg cagtcgttct catagagaga gcagagcttg ctgcgcaggt
                                                                     960
actcgtggac ctggtgggtc tccaccggcc tgctctccat gttgaggtcc cacaccttca
                                                                     1020
ccgacaggta gtctctggtc atcatgtacc gcccactatg actgaatttt acatcggata
                                                                    1080
tggatgaaat tatttctgag aagaaggacc tactgctggg atcttcaggc tcttcaaaaa
                                                                    1140
acttggagtg tctgtcgcac agggccgagg agcqcatgtc acacaggcgg atggtccctt
                                                                    1200
tgctactgct gtagacgaac acgttgcact ggtgcgggtg gaactcggct gcagtgatga
                                                                    1260
cttcggtcag ctcctccatg ttagcaggct tgatgtccac gatgttaaag cttctatctq
                                                                    1320
tgatttctaa gtgccataaa ttaattctca ggtcatccgt agcgccgtga tcctaaatgg
                                                                    1380
gtctcgaagt cttccatctt cgtctttcag gttataacct tctgctcttt tatcccqttc
                                                                    1440
acttattttc cataatttta tagttttatc atttgtagac agtagaaaat gagcagcatt
                                                                    1500
ctgttgtggt aaccacctaa ttttattaat tttttcctca atttctaqac ttttcaaata
                                                                    1560
gtcgatctcc ggttcatgac tgtg
                                                                    1584
```

```
<210> 3647

<211> 2149

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1046)...(1711)

<223> similar to gi3873795 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3647
acgagcctgc gttttccggc cagaggacat gatgcagggg gaggcacacc ctagtgcttc 60
ccttattgac agaaccatca agatgagaaa agaaacagag gctaggaaag tggtcttagc 120
ctggggactc ctaaatgtat ctatggctgg aatgatatat actgaaatga ctggaaaatt 180
gattagttca tactacaatg tgacatactg gcccctctgg tatattgagc ttgcccttgc 240
```

```
atctctcttc agccttaatg ccttatttga tttttggaga tatttcaaat atactgtggc
                                                                      300
accaacaagt ctggttgtta gtcctggaca gcaaacactt ttagggttga aaacagctgt
                                                                      360
tgtacagact acgcctccac atgatctggc agcaacccaa atccctcccg ctccaccttc
                                                                      420
cccttcaatt cagggtcaga gtgtgttgag ttatagccct tctcqttcqc ccagtaccag
                                                                      480
teccaagtte accaecaget gtatgactgg ttacageeet cagetgeaag gtetgteete
                                                                      540
aggtggcagt ggttcttata gccctggagt gacctactcg cccgtcagtg gttataataa
                                                                      600
gttqqcqaqc tttaqcccct ctcctccttc tccqtaccct accactqttq gaccagtqqa
                                                                      660
gagcagtgga ttgagatctc gctaccgttc ttcacctacc gtctacaact cacctactga
                                                                      720
caaagaagac tacatgaccg acctacgaac tttggatact tttctcagaa gtgaagagga
                                                                      780
gaaacagcat agggttaagc tggggagccc agattctacc tctccttcca gcagtcctac
                                                                      840
tttctggaac tatagtcgtt ctatggggga ttatgcacaa actttaaaga agtttcagta
                                                                      900
tcagcttgcc tgtaggtctc aggccccatg tgctaacaaa gatgaagccg atctcagctc
                                                                      960
taaacaagcc gcagaagagg tctgggcaag agtggctatg aatagacaac ttcttgatca
                                                                     1020
tatggattca tggacagcta aatttagaaa ttggatcaat gagacaatat tagtgccact
                                                                     1080
tgttcaagag attgagtctg tcagcacaca gatgagacga atgggttgtc cagagctaca
                                                                     1140
gataggagag gctagtatta ctagcttgaa acaagctgcc ctggttaaag cgcctctcat
                                                                     1200
teegaetttg aacaeaateg tteagtatet agaeettaet eeaaateagg aataettgtt
                                                                     1260
tgaaaggatc aaagaactat ctcagggagg ttgtatgagc tcatttcgat ggaacagagg
                                                                     1320
tggcgacttc aaaggacgaa agtgggatac agacctgccc accgattctg ctatcatcat
                                                                     1380
gcatgtattt tgcacctacc ttgattccag attacctcca catccgaagt atcccgacgg
                                                                     1440
aaaaactttt acttctcagc actttgttca gacaccaaat aaaccagatg ttacaaatga
                                                                     1500
gaatgttttt tgcatttatc agagtgctat caaccctccc cattatgagc tcatctacca
                                                                     1560
gcgtcatgta tacatacctg ccaaagggca gaaataatat gtttcataca ttgttgatgt
                                                                     1620
ttctctacat cataaagacc aaagagtcag gaatgcttgg gagagttaat cttggtctat
                                                                     1680
ctggtgtgaa tatattgtgg atctttggcg agtagcaagt catatattta attctgacat
                                                                     1740
ttagactatt tcactgaacc agaagtcgaa actaaacatc tctgagccac tgactcttct
                                                                     1800
gaaataaaat acacatgggt gtatgttaca gactctttag atttaacaga aaatgtagct
                                                                     1860
gttatgaaat gtaattgtaa aaatatgtcc cgtatcttct atatcgagac attgccttta
                                                                     1920
attttatatc gcttttcaga aatttcagtt gactacaaaa ctgcaaccct tcggattttt
                                                                     1980
attgactcaa aatagtgcca ttccccttaa tgaaatagat tttgagtctt tttttcattg
                                                                     2040
taacccccaa atgagaatca tctacctgat tcttgtacca aaaaaaaatt tttttcagtc
                                                                     2100
ttttttttt ttaaagaggg tttttgccaa cccaaactgg agggcaggg
                                                                     2149
```

```
<210> 3648
<211> 831
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (834)...(92)
<223> similar to gi2232013 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3648

ttttttttt ttcaggtgaa attaaactga tttaatcagc acacattata tacatgtatc 60
aaatttcaca ctccataaat atgtataact tatatgtcat ttaaaaataa tgataaaatt 120
atatccagat tcaagcgcct cttgtagcgc ttcccacagt cctcacattt ggatgggttt tctccactgt ggtactcttt gttggtcttt acagtatgac cgggcataca agcctcttc 240
cacagtcttc acatttcaat ggctttcttt ggcagtggag tttcttatga ttcaaaatac 300
```

```
tagaagcatg totaaagcto ttoccgcagt tatcacagtt ataagatoto totcccgtgt
                                                                      360
gggttctatg gtggaagtca agacctgact tactaatgta gcccttccca cactcctcac
                                                                      420
atttgtatgg cttttctcca gtgtggactc gttgatggac caaaagatat gaggaccatt
                                                                      480
tgaagctctt cccacattct ttacaattat atggtttctg tcccatatga atcatctgat
                                                                      540
gcttatgcaa atctagccta tcaatgaaac ctcttccata cttttcagat ttgtacagtt
                                                                      600
tctctgctgt gtggaccatg caatgcctat taagacttga cctaagacag aagctcttac
                                                                      660
cacatatttc acatttgaat ggcttctccc cagtatgaat tctgtgatgt ttctgaagct
                                                                      720
ggaaattgtg catgaaagcc ttcccacatt tctcacaatt ataaggtttc tctcctqtgt
                                                                      780
gtaatttgca gtgaacttga agtatcgctc tacatctgaa gcctttccca c
                                                                      831
```

```
<210> 3649
    <211> 770
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (773)...(600)
    <223> similar to gi1232163 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3649
aacgaatctg gctctgcctg aatcatcgat gacagggcaa aggcaactgg agcagatggg
                                                                   60
agetetggca aacaegggag gagggtettg gaagageeee egteeceage ggetagatge
                                                                  120
ttacacatgg acgatetact etectgactg tggeeteate aggetggtge etaceatetg
                                                                  180
tggttgtaaa ggtcccaaag agggcctacg gaaaggacag gtgggctgga aggaatgtgg
                                                                  240
agaatgaccc ccaggacagg ggaggaggag actggcccca tcaatccagt tcacagccgg
                                                                  300
gaaaagtgca ggaagacaga caaacgaccc caatgtgggc gaaggacaca cctccaagga
                                                                  360
ctggagccgc agagtccacg tgacaaggag acccaggata gaaacactgt gcggaggaca
                                                                  420
cggtgtcaac ctcggaaggg gcctcctatg ctttccacac caaattcccc cacgggagaa
                                                                  480
accetgecae aaggeecagg aaaceaeaga eeccaageea actgtgeeta geaeagaeae
                                                                  540
caaggaatga cagcgatgcc agtgacgcca ggaggacttg gcccctagcc ccatcatcgg
                                                                  600
ctgtatgatg attggtgtt ctgcggcctc cctctcgtca gactgcagcc ttgggggaca
                                                                  660
720
gcggttgaag cagcaccaca gacagcagca gcagtagcag caggtgagga
```

```
<210> 3650
<211> 2069
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (24)...(1701)
<223> similar to gi2224713 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters
```

```
<400> 3650
ggcacgaggc ccagtggtat gggcctagtc cagactgcca caagtcccac ccattctacc
                                                                       60
acaagcccca cccatcccac cacaagcccc atccttataa atgtaagccc ttccacttct
                                                                      120
ctagaacttg ctaccetete cageceetee aaacacteag accecaceet eccaggeact
                                                                      180
gactcccttc cctgtagtcc cccagtctcc aattcctaca ctcaggcaga ccctatggcc
                                                                      240
cccagaactc cccacccaag tcctgcccat tccagtagga aacccctcac aagccctgcc
                                                                      300
ccagatecet cagagtetae ggtteagagt etaageeeca eteceteaee eccaaceet
                                                                      360
gcaccccagc attcagacct ttgcctggcc atggctgtcc agaccccagt cccaacggca
                                                                      420
gccggagggt ctggggacag gagcctggag gagqcactgg gggccctaat gqctqcctq
                                                                      480
gatgactacc gtggccagtt tcctgagctg cagggcctgg agcaggaggt gacccgccta
                                                                      540
gaaagtctgc tcatgcagag acaaggtctg actcgcagcc gggcctccag tctcagcatc
                                                                      600
actgtggagc atgccttgga gagcttcagc ttcctcaatg aagacgaaga tgaagacaat
                                                                      660
gatgttcctg gggacaggcc tccaagcagc ccggaggctg gggctgagga cagcatagac
                                                                      720
teacceagtg eccgeeect cageaegggg tgteeagete tggatgetge ettggteegg
                                                                      780
cacctgtacc actgcagtcg cctcctgctg aaactgggca catttgggcc cctgcgctgc
                                                                      840
caggaggcat gggccctgga gcggctgctg cgggaagccc gagtactgga ggcagtatgc
                                                                      900
gagttcagca ggcggtggga gatcccggcc agctctgccc aggaagtggt gcagttctcg
                                                                      960
gcctctcggc ctggcttcct gaccttctgg gaccagtgca cagagagact cagctgcttc
                                                                     1020
ctctgcccgg tggagcgggt gcttctcacc ttctgcaacc agtatggtgc ccgcctctcc
                                                                     1080
ctgcgccagc caggettggc tgaggetgtg tgtgtgaagt tcctggagga tgccctgggg
                                                                     1140
cagaagctgc ccagaaggcc ccagccaggg cctggagagc agctcacagt cttccagttc
                                                                     1200
tggagttttg tggaaacctt ggacagccc accatggagg cctacgtgac tgagaccgct
                                                                     1260
gaggaggtgc tactggtgcg gaatctgaac tcggatgatc aggctgttgt gctgaaggcc
                                                                     1320
ctgagattgg cgcccgaggg gcgtctgcga agggacgggc tgcgggccct cagctccctg
                                                                     1380
ctcgtccatg gcaacaacaa ggtcatggct gctgtcagca cccagctccg gagcctgtca
                                                                     1440
ctgggcccta cetteeggga gagggeeete etgtgettee tggaccaget ggaggatgag
                                                                     1500
gacgtgcaga ctcgagtggc tggctgcctg gccctaggct gcatcaaggc tcccgagggc
                                                                     1560
attgagcccc tggtgtacct ctgccaaact gacacagaag ctgtgaggga agctgcccgg
                                                                     1620
caaagcctac agcagtgtgg agaagaggga cagtctgccc atcgacggct ggaggagtcc
                                                                     1680
ctggacgccc tgccccgcat ctttgggcct ggcagcatgg ccagcacagc attctaaact
                                                                     1740
attcacccat gggttcctgg tgcccctttc cccccacttt cagggctcac caggcactgg
                                                                     1800
cagggagggt aagggctggc tccagatacc cctcccccac agattcctag caatgaaaat
                                                                     1860
ctaatatatt cttctgttgc ccctggggtt ggagagtcag tgcctgcagt caagtgcctc
                                                                     1920
ccagcctcgg ctcagcacat cccttgccac aaatcagtgt ctggggcttg gccaccctgc
                                                                     1980
cgctgcccag ccacatccct tggttttgta ttttatttac agagttttac agaaaataaa
                                                                     2040
aaagcaaaat gtctttccta aaaaaaaaa
                                                                     2069
```

```
<210> 3651
<211> 1678
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (199)...(998)
<223> similar to gi3874973 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3651
gcggtggaat tcatagacct cttacctgaa ggaaagagac aggcagcaat tgataaaatg
                                                                       60
accaagaaaa tgcagaagac cctagagaac accaagttcc gaggtgcacc gattataccc
                                                                      120
gtggcggcca agccgggggg accagaggcc cccgaaactg aagctccaca gggcattcca
                                                                      180
gageteattg aggtggtgaa gaaggtgaag tecatgeaga tgtteeacat geceateact
                                                                      240
tcagccatgc aaggagaccg gctgggcatc tgcgtcaccc agtttgaccc taagctgctg
                                                                      300
gagcgcgggt tggtgtgtc ccccgagtcc ctgcacactg tccatgcggc cctcatctct
                                                                      360
gtggaaaaga taccgtattt ccgggggccc ctgcaaacca aggccaagtt ccacattaca
                                                                      420
gtgggccatg aaacagtcat gggccggttg atgttcttca gtcctgctcc agataacttt
                                                                      480
gaccaggage ctatactgga ctettteaac tteteteaag aatacetttt ceaggageag
                                                                      540
tacctgtcca aggatttgac accagcagtg acagacaatg atgaggccga caagaaggcc
                                                                      600
ggccaggcca cagagggcca ttgtcctcgg cagcagtggg ccctggtgga gtttgagaag
                                                                      660
cccgtcacct gccctcggct gtgcctggtg attggctcca ggctagatgc ggacattcac
                                                                      720
accaacacgt gccggctagc cttccatggc atcctgctcc acgggctaga ggacaggaac
                                                                      780
tacgccgaca gcttcctgcc caggctgaag gtgtacaagc tgaagcacaa gcatggcctt
                                                                      840
gtggagcggg cgatggatga ctacagtgtg atcggccgct ccctgttcaa aaaggaaacc
                                                                      900
aacatccagc tcttcgtggg gctcaaggtg cacttgtcca ctggggaact gggcatcatc
                                                                      960
gacagtgcct teggecagag eggeaagtte aagateeaca teecaggtgg ceteageece
                                                                     1020
gagtccaaga agatcctgac acccgccctc aagaagcggg cccgggctgg ccgtggggag
                                                                     1080
gccaccaggc aggaggagag cgccgagcgg agcgagccct cacagcatgt ggtgctcagc
                                                                     1140
ctgactttca agcgttatgt cttcgacacc cacaagcgca tggttcagtc tccctgagtg
                                                                     1200
teeggtgace teeceeaggg ceteettgee cageecagte caggetgetg tgecaaatee
                                                                     1260
caaccagcca cgcctcagcc tctcccagtc tctccctgca gtcctgcagc agcagcccc
                                                                     1320
acccccaage ttggtgctga gccctggtga ggagctgagg gggatgggtt gctggggcca
                                                                     1380
ggagggtete tectecagee cetgeacaet eccacecagg acageceeca geccaactag
                                                                     1440
gaaagggcca tgggcagagg gctggtagcc agtatcttcc actgccccat ctgttggcca
                                                                     1500
cctgcaggcc agtctcaacc ctcccccagg tgggcaggca cttgatggct acaaataaat
                                                                     1560
gtcccgtggc cccagcccac tctactggtg tctctctctc tgtgacttca ctaggtccgc
                                                                     1620
egeceteece agetgtgtte caaggggaat eteagaaate ecaagagtte etgeceag
                                                                     1678
    <210> 3652
    <211> 914
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(915)
    <223> n = a,t,c or g
    <220>
    <221> misc feature
    <222> (2)...(278)
    <223> similar to gi2411475 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3652
```

cttcttttta atagtgaaag cccgcaggaa gcaagcagct gggagaccag agaaaatgga

```
tgatgaagac cccattatgg gtaccatcac ctcggaagaa gccctggcca gacagccccg
                                                                      120
gagatcaagc atctcctcct ggggatgccc ctcccttgga agaacaaaag gagctccatt
                                                                      180
atgcctccct tagtttttct gagatgaagt cgagggagcc taaggaccag gaggccccaa
                                                                      240
gcaccacgga gtactcggag atcaagacaa gcaagtgagg atttgcccaq agttcagtcc
                                                                      300
tggctggagg agccacagcc tgtctggggg aaaggacaag tcagggacca cttgctgaag
                                                                      360
cacgaagagc ccttgtggca atgttaacat taactgatgt ttaagtgctc caagcagagc
                                                                      420
agaaagaaaa cagatgatgg aattagagag gtgggctcaa atctaggccc tggcactgtc
                                                                      480
atcaagcaat tcactgcatc cctctgtgcc tcagtttccc attctgtaaa tcagagatca
                                                                      540
tgcatgctac ctcaaaggtt gttgtgaaca ttaaagaaat caacacatgg aaatcaacca
                                                                      600
acatgggtcc tggaacaggg cgttgtgctc agtgctttct ggtctctctt ccttgaatag
                                                                      660
aaaggtcctg ctggcaagtt ctctcaaggc tggggatgac caggcacaaa aaacagggca
                                                                      720
gcaatatgtt ggtgtcactc cccttcccaa aactcttcga agactcccta ggaaagacca
                                                                      780
gcccctcagc ctggcacttg gttcatgatg tgggatctta tatccttgcc agagtcatat
                                                                      840
ctttgcccac ttttacctgc aatcettgca tcatatteet tgggttecag tentteattt
                                                                      900
atgagaccct aggg
                                                                      914
```

```
<210> 3653
<211> 1895
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (25)...(1543)
<223> similar to gi563129 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3653 actgtagacc attagtccag tgcggtggaa ttcatcaacc gaaacaacag tgtggtacag 60 gtcctgcttg ctgctggggc tgatccaaac cttggagatg atttcagcag tgtttacaag 120 actgccaagg aacagggaat ccattetttg gaagteetga teacceqaga ggatgaette 180 aacaacaggc tgaacaaccg cgccagtttc aagggctgca cggccttgca ctatgctgtt 240 cttgctgatg actaccgcac tgtcaaggag ctgcttgatg gaggagccaa ccccctgcag 300 aggaatgaaa tgggacacac accettggat tatgeeegag aaggggaagt gatgaagett 360 ctgaggactt ctgaagccaa gtaccaagag aagcagcgga agcgtgaggc tgaggagcgg 420 cgccgcttcc ccctggagca gcgactaaag gagcacatca ttggccagga gagcgccatc 480 gccacagtgg gtgctgcgat ccggaggaag gagaatggct ggtacgatga agaacaccct 540 ctggtcttcc tcttcttggg atcatctgga ataggaaaaa cagagctggc caagcagaca 600 gccaaatata tgcacaaaga tgctaaaaag ggcttcatca ggctggacat gtccgagttc 660 caggagcgac acgaggtggc caagtttatt gggtctccac caggctacgt tggccatgag 720 gagggtggcc agctgaccaa gaagttgaag cagtgcccca atgctgtggt gctctttgat 780 gaagtagaca aggcccatcc agatgtgctc accatcatgc tgcagctgtt tgatgagggc 840 cggctgacag atggaaaagg gaagaccatt gattgcaagg acgccatctt catcatgacc 900 tccaatgtgg ccagcgacga gatcgcacag cacgcgctgc agctgaggca ggaagctttg 960 gagatgagcc gtaaccgtat tgccgaaaac ctgggggatg tccagataag tgacaagatc 1020 accatctcaa agaacttcaa ggagaatgtg attcgcccta tcctgaaagc tcacttccgg 1080 agggatgagt ttctgggacg gatcaatgag atcgtctact tcctccctt ctgccactcg 1140 gagctcatcc aactcgtcaa caaggaacta aacttctggg ccaagagagc caagcaaagg 1200 cacaacatca cgctgctctg ggaccgcgag gtggcagatg tgctggtcga cggctacaat 1260 gtgcactatg gcgcccgctc catcaaacat gaggtagaac gccgtgtggg gaaccagctg 1320

```
gcagcagcct atgagcagga cctgctgccc agggggctgt actttgcgca tcacggtqga
                                                                    1380
ggactcagac aagcagctac tcaaaagccc agaactgccc tcaccccagg ctgagaagcg
                                                                    1440
cctccccaag ctgcgtctgg agatcatcga caaggacagc aagactcgca gactggacat
                                                                    1500
ccgggcacca ctgcaccctg agaaggtgtg caacaccatc tagcagccac ctgcctgctc
                                                                    1560
ctatgtgccc tcaccatcca ataaaggccc cttggctgtg gcatggcaaa aaaaaaaaa
                                                                    1620
agggggggcc gtttaaaaga accettgggg ggcccaaatt taaccegggc gggcaaggaa
                                                                    1680
aaatttttt ccttatgggg ggccgaataa aaaccaacct gggaattttg ggaaagaacc
                                                                    1740
cttattttgg gggggggaca aattgggcca acctccctac aaaaattaaa ggctttaggg
                                                                    1800
aaaaaaaaaa tttttaaggg gaaaaggggg aaaaacaacc ggcataccct ggcggttgga
                                                                    1860
aagttttgtt tacggagtat gatttagaaa aattt
                                                                    1895
```

```
<210> 3654
<211> 983
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (37)...(272)
<223> similar to gi1710216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3654
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                                                                      120
ggggctacag gcgctcgcca ccgcgcccgg ctaattttt ttgtattttt ggtagagacg
                                                                      180
gggtttcgcc ttgttggccg ggatggtctc gatctcctga cctcatgatc cgcccgcctc
                                                                      240
ggcctcccaa agtgctggga ttacaggcgt gagccactgc gcccqqccaq aatatagcta
                                                                      300
agttttaagc aagtgttcac taggcataag aatatacatc ctggagagaa atcacagaag
                                                                      360
tgtagtatat gtggcaagaa tactacttaa aggtcaaaac ttgtggatct ataactcaaa
                                                                      420
gtgcagatat gctttacaaa tgaaatgagg gtggcagaag cttcaccaga gttcagtcac
                                                                      480
tacttgagag tttatattgg aaagaaatcg tataaatgta tgtgctagag gcttccccga
                                                                      540
ggtgtctgaa ctcactagac ctcaaaatat acatctttga caaatgtaat gtgtgtgcta
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agacttttta cccgaacatc caaatggaaa catcagagta ttcatactgg agaacagtct
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tacaaatgta acgaatgtgg taagcctttt taaaaatcaa atgggctggg tatggtggct
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cacacctgta atcccagcac tttgggaggc cgaggtgggt ggatcatctg atgtcaggag
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gctgggcagt ggtgggcacc tgtaatcccg ctacttggga ggctgaggca gaagaatcac
                                                                      900
ttgaatccag gatgtggagg ttgctgtaag ccgagattgc gccattgtac tccagcctgg
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gtgacaagag tgagactctg tct
                                                                      983
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<210> 3655
<211> 3848
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> (3849)...(0)
<223> similar to gil665803 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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```
ctgttgttgt gggtacaaca ttcctccagc tgtaggatag gggttgctgg gactggagag
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gaagetttea ettgeacgaa atceagetgg tggatggatt geageagagg getgttgtee
                                                                     2940
agactcaagt caaagtccgt ggtcatcctt ggagtgagtg tgcctttacc ccactgatcc
                                                                     3000
tcagtcaggt gcactcttct tatgagggcg tcagaaatct gcaaaaaacc actaggatca
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ttttccttaa tcacctccaa gcagtactcc atgagacctg tggtctggcg caatttcact
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gtgcagtgag agatctgatc tcgaaccacc ttcagcttgt gctcatgctc cttgttgacg
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cgggccagca gctgggcttt tcttctgttg agggcatcga tgagggcatc acattgggcc
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accagacagg cttcaaactc cacactgttc teetggatet getggaecat gttgegeage
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tgtaccagaa actccttggc ttctttggcc ctgtctgaca gtccgttcag cgcctgggag
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agctggctct tatgtagttt ccacatggcc cccagagcct tgacttcgtg gctggagtgt
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tggttctcca gctcgtggtc tgtgcaggtg gagaccttgc gtgggctcag cctccggctc
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acacgaccct gggccggggg caccaggcgg tgcttggcta ggggcccccg gggcgggtgg
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cagcgcaggc ggcacggatc gcagtagaag acatcgcact gttcgcacat gacggtggct
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tccttgggcg ccttctcgca gagctggcac ttgagggccg cggctttgct ctgctggtag
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eggteaatta eccetteeag taegegatte ttggggaage egeggageee eeggteatee
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agggccgg
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```

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<210> 3656
<211> 6995
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3900)
<223> similar to gi3327058 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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ctctccctaa tcgactccac cgacaaggtc cctaccccag agcttccatg caaaggaatt
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tgagatggca gttcatgaag cacagaagat aaagaagaag tctttcatct ttactgctga
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gatccttggg aacactgttg tcatgggggc tctgccaaga ccctcatctc tgggctacac
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ggtgattcag attgagcacc aacttgtttc ctcccctcaa agttctgcct aagccgttca
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ctcagtttaa tgtgggatta agagccaaga aaagcctaga gagactggat atcacaattt
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ctgcaactgc taggactgaa agcagaggct gggtgccaga gcacgtgatt cttaacatca
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5640
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gagggacgcg tttcaagggg ttgggtatta ctgacgagct ttggctcaaa atatagcagg
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accaggictt tigitgataa giacigtiig titattaata igicattaat ggiatticti
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aacattgctg gacgtcctca tagtactcac aaagggctag ccttgaatgt cactcgccca
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gtcttcagtc tcctgactta gagatacaat cacgtcacag gtctcttggc ctcaatctga
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aaactgctgc cgccgcgccg aggagactcg catgccgcca ccacctcact gggagggcgc
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teceggaeet geggegatge caegggeetg cettttetat gegeeteaet agettaceae
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cctgtgcagg taatgcaact gactttgtct catcagtctt tttctttccc tqccaccctt
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tatttatcaa gcgtaatgtt acactttaaa ggacagcaaa taagaacttt gtagaatccc
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caccaaaata gttatgttgg cactgtgttc acacgcatgg tccccacacc cccaggttgg
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6840
totgtattta tatottattt gtttcacttt caagggtatc atggcaaatg tacagatttt
                                                                  6900
tttgttaata atgtgctagg atttgctaaa aaagaaaaaa aaaaaaccct tttgagtttg
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ccctaaaata aatgagactt aattcaaaaa aaaaa
                                                                  6995
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<210> 3657
<211> 1155
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1071)...(481)

<223> similar to gi1665823 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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gatggttttg catcagtcac tgcaggtaga ttgagcaagc tttttgtgtt tgttttttta
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aacatgcatt caactagata tgattcagaa tagattaata ctcccttttt atcattacag
                                                                      240
ttagctaaaa aattgccagg gcagtccaca aaacagaatt tgctttaaga ccaacccaca
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gagtcagctg gagactaacg gcgctggggc ctgctgggcc gggatatagt cgtgtttagc
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taagtgtcga gagcattaag aagaaagtcc tggttggagg cgcaaggcct gcagcaccag
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tgaccgggtg gggggcgaca ggagttgggg agtgagcagt cagcagggta cctgctgaca
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caggagtgta acctgtttgg aaggtaggat tcgctccagg atacatgtta ggagaatagg
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caggagetge tgetgeatag eccatgggaa aaccagetgg ataaccaatt cetttggeat
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ttgcataggg aaccccagaa gatccaggac tataaacagg attcatgatt tcaaaaacct
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ccgagccccg cgtctccgcc gcctcccgga cgacgaactc ccgctcgctc ggctccgctt
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ggcccggcca cgaaa
                                                                     1155
     <210> 3658
     <211> 1841
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1843)...(513)
     <223> similar to gi3415109 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3658
gagaaccaga atgcttatat tttattagta tccaagactg gggagaggga tggggtggga
                                                                       60
gagatcaaga attggggagc agatgggagg cgctacctca ctcaggagac acgagttctt
                                                                      120
atccaagttc aaggtgaaag aagtgagggc aggaagagaa atctccctgc tagcaacagc
                                                                      180
gactcaggga gaaactctgg gcccatagct agctggaggc agggtgacat tgctcccacc
                                                                      240
aatgggccat cttcttagct acacctttgt agctgtggtg ccaggcagaa gaaccacctg
                                                                      300
gaaactgagc taaggcaggt toottottoo aacagaagac acagctgggc agggactgtg
                                                                      360
cagactcaac agggccaggc cagctagtgg ccagtcagtg ttcatgtctc tcaccagtgc
                                                                      420
ctggagggtc cccagccaag gaaagaactg gtcagttcct gccagcagct tgagctggaa
                                                                      480
tgccctggga gggtcagtag agggtggtca cttgaggagc ttcacagaga ggcggatgtc
                                                                      540
aacatcgcag aggaagatgt ccatgaggtc atggcctgcc tcctgtgcta tctgggagat
                                                                      600
cacgtggccc ttcggaccaa tcaggagttt cacataagat tctttgggca ccagaagctt
                                                                      660
ctgttggata accagetece caeetggtee tteeteccae actgetgtet tetgetgtae
                                                                      720
attgtaaggc acctcctggg gcaggtgttc taggagcttc tctcggataa tgttggcaca
                                                                      780
```

```
gatctcttct ggtgtctggc tagtgaggac tgcactgtgg tactcccagg gccctggctg
                                                                      840
ggcctgtgtc agaaggtatt gctttagtgt tttcacatcc tcctggctta gggctgacaa
                                                                      900
catgaagatc tccttgaagt ggggccagcc aatcctctga ggatttccca cagattgtgt
                                                                      960
gtttgggtcc ttaactgctg ggctggggca atgggtgcca gggtgtgagt ggaaggcctg
                                                                     1020
cctcatcttg agctttttgc cattgaccac accttcagtg agggctgccg tgagctccag
                                                                     1080
gagaactgac ttctgcttca aacaatctac cttgttcatg accaggacac tagggatctg
                                                                     1140
ggagtacttg gtcaagcacc tgagcaactg ggggctgagc tggttccgtg tccacttgtc
                                                                     1200
tgagacatcc acaagaacca caacaagatc agcagattcc atgctcttcc atggatcttc
                                                                     1260
caacaaagag agctccaggt gatgcctctt ctgtttacca ggactgataa tgccaggtgt
                                                                     1320
gtcaagtaga atcacctggg tctccttctc tgtgatgacc cccagagctt ggcagcgagt
                                                                     1380
agtatgcacc ttcctggaaa cagggaacac ctttcggccc agtagctggt tggagagtgt
                                                                     1440
tgacttccct gcattcgggg ctcccaggag gaccactcgt aggacccggg aattctcagg
                                                                     1500
catatcaggg tgatggacca agaggacatc ctgctcatct ctgttcatgg acaccgcggg
                                                                     1560
gacgcaagga gtcaccgaac tgtcgggctg agagaatccg aggaagtggt ccagggcaga
                                                                     1620
gccctggcca ttactgcgag aagccgaggc caagcgggga ccagagaaag cggacccgc
                                                                     1680
gacgcaggac acgcacctcc gttggaagcc taagagtgag gaaaaaggga tcacccgctc
                                                                     1740
cctcgcgaca tgagggccca cctgccagac tcttaacacc gattgaacaa gcctagcccc
                                                                     1800
gcgccagctg ggggcagcca tcctcgtgcc aagcttggcg t
                                                                     1841
```

```
<210> 3659
     <211> 1917
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1069)
     <223> similar to gi4583418 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3659
atggcgctga gtgaacccat cctgccgtcc ttttccactt tcgccagccc gtgccgcgag
                                                                       60
cgcggcctgc aggagcgctg gccgcgcgcc gaacccgagt ccggcggcac cgacgacgac
                                                                      120
ctcaacagcg tgctggactt catcctgtcc atggggctgg atggcctggg cgccgaggcc
                                                                      180
geoceggage egeogeogee geoceogeog cotgegttet attaccooga accoggogeg
                                                                      240
cccccgccct acagcgcccc cgcgggtggc ctggtgtctg agctgctgcg acccgagctg
                                                                      300
gatgcgccgc cggggcccgc actgcacggc cgctttctgc tggcgccgcc cggccgcctg
                                                                      360
gtcaaggccg agccccctga agcggacggc ggcggcggct acggctgcgc ccccgggggt
                                                                      420
gaaccggtgg accgcgggc ctcaagcgcg agggcgcccc gggcccggcg gcttcgtgca
                                                                      480
tgcgaggtcc cgggggccgc ccccgccgc cgcccgacac accgccgctc agccccgacg
                                                                      540
geocegegeg cetgeoegeg ceeggteege gegeeteett eeegeegeet tteggtggee
                                                                      600
etggtttegg egegeeeggg eeeggeetge attaegegee geetgegeee eeageetteg
                                                                      660
gtctcttcga cgacgcggcc gccgccgcgg cagccctggg cctggcgccc cccgccgccc
                                                                      720
gcggtctcct cacgccgcct gcgtccccgc tggagctgct ggaggccaag ccaaagcgcg
                                                                      780
gccgccgctc ttggccccgc aaacgcaccg ccactcacac tctgcagcta cgcgggctgc
                                                                      840
ggcaagacct acaccaagag ttcgcatctg aaggcgcatc tqcqcacqca cacaggtgag
                                                                      900
aagccctacc actgcaactg ggacggctgc ggctggaagt ttgcgcgctc agacgagctc
                                                                      960
acgcgccact accgaaagca cacgggccac cggccattcc agagccatct gtgcgatcgt
                                                                     1020
```

1140

geettetege geteegatea eetggegetg cacatgaaae ggeacatgta geegggaege

ccccgcccac ctgcgcgcgg gccgtgggcg ggttcccacg cgccgggcgc ggccccttcc

<210> 3660 <211> 1292

```
caaactgtga ctggtattta ttggacccag agaaccgggc cgggcacagc gtggctacag
                                                                    1200
agggtctccc tcgatgacga cgacgacgac gccaccaccc cagcccccgt ctgtgactga
                                                                    1260
aggcccggtg ggaaaagacc acgatcctcc ttgacqagtt ttgttttca aaatggtgca
                                                                    1320
ataatttaag tggcatcttc tctcccaccg ggtctacact agaggatcga ggcttgtgat
                                                                    1380
gccttgtgag aaataagggc cttaatttgt actgtctgcg gcatttttta taatattgta
                                                                    1440
tatagtgact gacaaatatt gtattactgt acatagagag acaggtgggc atttttgggc
                                                                    1500
tacctggttc gtttttataa gattttgctg ggttggtttt ttttttaatt aaaaagtttt
                                                                    1560
gcatctttta aaaaaaatca cagcactggt ctggttgctt qqaactqqqq ccttqqqqca
                                                                    1620
cttgggagga ggggggagcg gaaagtttga tggagggcag ccccactaa agcatcgtgt
                                                                    1680
qcaqtgggtc ctgcgtctgc cagcaccggg actgccagct gctgtgcctg cctgccagga
                                                                    1740
acctgtgggt ttttctgtaa atttagacac tgcattttag gactgaggga gggttatttt
                                                                    1800
aaggttgttc tttgagccat aaattgcctc tttgccccac atgctgggga aagtgctggt
                                                                    1860
cccactgacg tggcctcctc tacgttgaaa aaaataaaac tacttacctc ttcctgg
                                                                    1917
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(1293)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (904)...(621)
     <223> similar to gi726395 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3660
ttttttttta aaaaggtttt gcatttcata tttattatca qtqcttcaat ataqaatqtt
                                                                       60
ttgtaatgat tagcaacatt gtaaaacacc accaggtttt tccaacacta actgctagtc
                                                                      120
ttttccagta aatattttt ccccagacaa aataaccaaa cctaacacaa tttcaagaga
                                                                      180
tggtgatacc atcagcataa taacccaaat tacaaaaatg gcaatactta aaatcatgca
                                                                      240
tattatttca ccatttcata aaacttattt taaaatttct acaaactttc ccagtgtaaa
                                                                      300
agacteetea aaagetgeat gataacatta aactacaaaa tteaetttgg aaaagtaggg
                                                                      360
agttattttt ctaattttgg ctttaagatt ttttttttta aatgggttaa aagatacggt
                                                                      420
gaggagtgtg ttgagagagg tggagaaaag gagcttccag tcaatgcatt caccatatct
                                                                      480
gaaaatactt cagttataca aagggaacac ttcgagagta aggatatatt ataaataagt
                                                                      540
ctctcagcaa gatgaacgga tgaacagttc aattgcaccc acaggagaga gqtcttcttq
                                                                      600
qaqaatgctt qtttataqaa tcttctgtaa aatagagttg gctacttcta atgattcatc
                                                                      660
ttgtactaaa acaatatcat aagagtccat gtacttttct aaaagctcat ccactctatc
                                                                      720
atttagatat ccaattttca gaatgtgctc aacattggcc actccatctg ccattcttaa
                                                                      780
gtctccttgg gagtctccca aggagaatta tgttactatt gtcttttagt tgattgaaat
                                                                      840
attotgtatt cotcaaggoa coatcatgtt tgttaaatac atgaattagt totootttaa
                                                                      900
atcctttgag caccccctat gaaaaatata aatcttttga acaggcttta aaaattctat
                                                                      960
ttgttggatt ttcatatttt ggagctctta attgatgtca ctattatttc atcatatttg
                                                                     1020
```

1080

1140

taaatacatc tttgatacta gagatctcaa agcacttaag tccatcacat tcaccatagc

taagaagggc tcggagaagt aaatgatttt ttagatacta ttttaaatgg taaaacaaag

```
gccgggcgca ggggctccc cctgtaatcc cagccctttg gaaggccaag gaggccagat 1200 ccctcaaggt caggagttca aaaccaaact ggccagtcga cgcggccgcg aattccagat 1260 ctgttttcgt gntnctgann ccgccatggc tt 1292
```

```
<210> 3661
<211> 2092
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (428)...(685)
<223> similar to gi407992 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3661 ttgcctgttt ctcttctcc caaagagctg ggattaccgg tgtgagcgag cgcactcctc 60 cccccaaatt gtttaccttt acccgaagtt ggtatgcatt gacttacctg tggacaacag 120 tgatttttgt ctcctgtcct tacttctctc tgtctccaac tctcagggac tcattcatca 180 cctctccctg caccccaccc cctgacccgt gctagtttgg tatctatgcc tgtagctttg 240 ctttggggca tcatctgaat ctcatactgc acggcctttc agatctggct tcctqcactc 300 aatgtcatgc acgtctctta gtgccgtgtt cccttaatgc tgagtcatgc tccattgtat 360 ggatggacca catgactgat ttgcctcctg tccttagtcc tctcagcctc caactctcct 420 tcctgcaggc attgatgttg aacaagtgtc tgtcgtcatc aactttgatc ttcccgtgga 480 caaggacggg aatcctgaca atgagaccta cctgcaccgg atcgggcgca cgggccgctt 540 tggcaagagg ggcctggcaa gtgaacatgg tggacagcaa qcacaqcatg aacatcctga 600 acagaatcca ggagcatttt aataagaaga tagaaagatt ggacacagat gatttggacg 660 agattgagaa aatagccaac tgagaagctc caccagccac tgatgccagc cctggcactg 720 cccctgcaca ggagacaagt gcatttaggg cacaggcccc gacatcaccc caaggacaac 780 ggcagaagta gagagaaact acctacctca cttcaaatta tgtttggact tgacaaaaat 840 aggtgcaaat gatggggggc aatagaagaa aaaatttgca ttttggaaaa ttgggtcctt 900 tececaettt tttaaageea eatteeecea tetttataat aatetggtea eagtggtagt 960 cgctggcccc aggacccct cctgattttg gctaggcatc gtggaaccag ctccagcccc 1020 tgaagaaacg atagatgtgc aggttgtgcg gaagaggctg agtggaaaat ggtgtgagcc 1080 ccaccgctgt gcatcgaatg agggaagtgg cagcagagag gccagagctg cccctctct 1140 gtctcttcaa tggacccttc acaagtgttt ctcctgccct tggggctgtc ttccttctcc 1200 tgaaatccag agactttctt gctcatccct tctccctttc acttctgttc tctqctqcaq 1260 aaagcagact tgcatatccc tgatgagcag ctcggctact tttgtaaact tcagatttgg 1320 agagaaacac gaaagtetga ateetgaeee ettgagagag agtgatetgg egagggeega 1380 tgaaggggct gggcctggtc ttgccttctc ttctctcggt tgctccctct gcctaggccc 1440 ctggtactca gtcacggcag ccaggagacc ccaggtgagt ttctgagcgc atacgtagtt 1500 ggttettace eccaggtgte acaeggggee gagagetgag caagaatttg gaatggaagt 1560 tatgaccaag ggaattatgc tgttcattta taatagtgga cattatggag agctctgatt 1620 cctacataat atgaataagg atggataggc cgggcgtggt ggctcatgcc tataatccca 1680 gcacgttggg aggctgaggc gggcggatcg gttgagctca ggcgttcggg accagcctgg 1740 ccaacatgat gaaaccccgt ctctaccaaa aatagaaaaa aatatagccg ggcctggtgg 1800 cgcacgcctg tagtcccagc tactcgggag gctgaggtag gaggatcgct tgagcctggg 1860 tagaggetge tgtgagetga aatggegeea etgeaeteea geetgggtaa eagagegaga 1920 ccccgactca ataaataaat aaggatggat aaattgtagc gtatgcacca ttcattatgc 1980 taagacattt taaagtaatt atgagaaacg ctctactaat gatttgtttt tatttgtatt 2040

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (905)...(332)
     <223> similar to gi4884206 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3662
tttttttttt tgagaaaagc cgttgaggtc ctctcaaatc tgcatgtgag caagtaggtc
                                                                       60
tacaacaggc aaacatactg cttcccgact tctgaaaagt caaggaatcc taagtaatct
                                                                      120
agatgaaaaa gtgactcctt ggtttcttca cattcccctc caagagccca gtgagccatc
                                                                      180
agctcctggc cagcaacaca cctgatacaa aatgggagaa gtgtataaat tattatgttg
                                                                      240
ataagcaaga taagtgccaa agggtagata agagtgaaag cattgggaag cctggcagag
                                                                      300
tgcagtcagc aggtcagttc ctggcggttc attgagcagc ttggcccaaa gatgtaagtg
                                                                      360
aagtccctcc tggtggaggg atgagagcag ctccagttac tcgqccttca tgacacagga
                                                                      420
agttgaaggt ggcacaggca ttgggcgtgt cctgcacttc cacagcaatg ccccgctgcc
                                                                      480
tcatggcttg aagcacctgg gactgcagcc tctcggtccg gtctccagtc cccaccacca
                                                                      540
cgatctctat ccggggctcc agcaaccaga agagggaaaa gctgtcttcg gtgatgtcct
                                                                      600
ggtgggatcc cacgttccac tgcaccaccg agtgcgggag cagagcgcag gggccgagca
                                                                      660
cgcggtttcc gtttatcatg aagccgcggc tgttgtagct gtcgatgtac attgcctgag
                                                                      720
cggcctcgcg ttgcagcaga gagatgcgcg tccgctgata cagctcgtca tccgccggcg
                                                                      780
agagccgatg ccctcgccgc ggggcccagg gaagctcaac gggcggacag cgcagcgagg
                                                                      840
gtcgcgctcg gtacaagcta cgtagcgcga gagcggtggc catggctgac caacgcgcgg
                                                                      900
```

```
<210> 3663
<211> 1189
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1178)...(122)
<223> similar to gi899493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3663

cgaagtcgtc accggcgccg

<210> 3662 <211> 920

```
cggtcctaca gtagagatgg gcagtctgta gccgagccag gcatttcgtt aaaggcagga
                                                                       60
tctggtccgg gaggtctggg atctctggtt atatgggact tctgacctct gggcacctac
                                                                      120
tgcagctgtg gctgaggcca agaaatgtga ggggcctcca tccactgcat tgagtagcga
                                                                      180
ccccgacgtg gggttcaatg tggagcgggg aggggctgct qcqqcaqctq caqqaqccqa
                                                                      240
ggtgccaggc cttgttcttc tcatgccggc atccctgctt gcaggtgtga agggggcagg
                                                                      300
aatcagcgag gtgtcctggg ctgagtcccg ggagtgggaa gaggtggcag gaaggggatc
                                                                      360
tgaggaggag aacaggggtc ctggtggtct gtgcttcttc ccagacacgg gagctgtaga
                                                                      420
ggggacctct gcagcagatg ctaggggggc cactaggccc aggcagtctt gggacttggg
                                                                      480
tctgtcctgc tgtgcatcca tagtgggtgc tttagaaacg ggaggcccac ccgaagcccc
                                                                      540
tgttgcaagt gaggacaaag tgtgggaagg ccgtgagggt ctgcagtccg ggatggcctt
                                                                      600
gtcctcaacg tgcagtgcac tgttgatgcg ctggaatgcc gtctcttttt ccaggtgcag
                                                                      660
gtcttcagcc gtgacccggt accccagctc taagggaggt ggcagcatca aaggctcccc
                                                                      720
tcgcctgcgt ggcagcaggg gaatcttgcg tctacggggc ctagagtcct gggatctggg
                                                                      780
ggagccaccc gttggggcga ttgtctgccc tggtgctgta tctgccccct tttcacaccq
                                                                      840
tgtgtgaccc gaagagacag cctgaggcct gtcctcactc actgtctttg agtaactgag
                                                                      900
ggtcagctgg cagcgggatg aggctggccc cctcctctgc tttagccccg gcaagcctcc
                                                                      960
cgtggagctg taggagctgg agatggcatt tcgtttggtg ttcgagctcg tccaggatgt
                                                                     1020
ctgggatgtg tggttatatc tgatttctga gctctgggcg tggaggtctg tctgcagagg
                                                                     1080
cccgggcctg ggcacaaagg gagagggcc tccattgtcc cgcaggggcc aaaatgcaga
                                                                     1140
ccgtgcatcc ccggtgaacc tcgggaccgt tctctgatca tcaggattt
                                                                     1189
```

```
<210> 3664
<211> 1159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (41)...(425)
<223> similar to gi5734705 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3664
accggaccgg aatttccggg tgagaagatt tcgtcttgcc tcccccatca cgtccctga
                                                                       60
caccgacace ceattgetee cacagtetee ecagteteea etttggteee cagegetgte
                                                                      120
tgcccgagga tttgcctgaa ggctgccccc aactctgcac ccgccccccg agggccaccq
                                                                      180
aggaccatga ctaagacaga tcctgccccg atggccccgc caccccgagg agaggaggaa
                                                                      240
gaagaggagg aggaggatga accegteece gaggeececa geeceaecea ggagegeegg
                                                                      300
cagaageetg ttgtgcacce cteggcacct geceeetee etaaggacta egettteace
                                                                      360
ttcttcgatc ccaatgaccc ggcgtgccag gagatcctgt ttgaccctca gaccaccatc
                                                                      420
cccgagctgt ttgccattgt gcgccagtgg gtgccccaag tccagcacaa gatagacgtc
                                                                      480
ateggeaatg agattetgeg eegaggetge catgtgaacg ategtgaegg getgaeegae
                                                                      540
atgacactgc tccactatgc agtgcaaagc tggggcccac ggagtcgggg accccgcggc
                                                                      600
agccgtgcgc ctctcgcagc agctgctggc gctgggcgca gatgtgacgc tgcgcatccg
                                                                      660
ctggaccaac atgaacgcgc ttcactacgc ggcctatttt gatgtgcccg acctcgtgcg
                                                                      720
tgtgctgctg aagggtgcga ggccgcgagt ggtgaactcc acgtgcagtg acttcaacca
                                                                     780
cggctcagcc ctgcacatcg ctgcttccag cctgtgcctg ggcgccgcca aatgtttgct
                                                                      840
ggagcacggc gccaaccctg cgctgaggaa tcgaaaagga caggtgccgg cggaggtggt
                                                                     900
cccagatcct atggacatgt ccctggacaa ggcagaggcg gcactggtgg ccaaggagct
                                                                     960
gcggacgctt ctggaagagg cagtgccact atcttgcgcc ctccccaagg gtcacgctac
                                                                     1020
```

```
ccaactatga caacgtccca gggcaatctt catgcttagc gcactgcgtt gcgcctggga 1080
gaccgcgtgc tgctggatgg ccagaaggtc aggggctggg atgtgtgttt gcatggtggg 1140
tgggggtggg actcagccc 1159
```

```
<210> 3665
<211> 5530
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4500)

<223> similar to gi1504040 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3665 agccggccgt ggtggctccg tgcgtccgag cgtccgtccg cgccgtcgqc catqqccaaq 60 cgctccaggg gccccgggcg ccgctgcctg ttggcgctcg tgctgttctg cgcctggggg 120 acgctggccg tggtggccca gaagccgggc gcagggtgtc cgagccgctg cctgtgcttc 180 cgcaccaccg tgcgctgcat gcatctgctg ctggaggccg tgcccgccgt ggcgccgcag 240 acctccatcc tagatcttcg ctttaacaga atcagagaga tccaacctgg ggcattcagg 300 cggctgagga acttgaacac attgcttctc aataataatc agatcaagag gatacctagt 360 ggagcatttg aagacttgga aaatttaaaa tatctctatc tgtacaagaa tgagatccag 420 tcaattgaca ggcaagcatt taagggactt gcctctctag agcaactata cctgcacttt 480 aatcagatag aaactttgga cccagattcg ttccagcatc tcccgaagct cgagaggcta 540 tttttgcata acaaccggat tacacattta gttccaggga catttaatca cttggaatct 600 atgaagagat tgcgactgga ctcaaacaca cttcactgcg actgtgaaat cctgtggttg 660 gcggatttgc tgaaaaccta cgcggagtcg gggaacgcgc aggcagcggc catctgtgaa 720 tatcccagac gcatccaggg acgctcagtg gcaaccatca ccccggaaga gctgaactgt 780 gaaaggcccc ggatcacctc cgagccccag gacgcagatg tgacctcggg gaacaccgtg 840 tacttcacct gcagagccga aggcaacccc aagcctgaga tcatctggct gcgaaacaat 900 aatgagctga gcatgaagac agattcccgc ctaaacttgc tggacgatgg gaccctgatg 960 atccagaaca cacaggagac agaccagggt atctaccagt gcatggcaaa gaacgtggcc 1020 ggagaggtga agacgcaaga ggtgaccctc aggtacttcg ggtctccagc tcgacccact 1080 tttgtaatcc agccacagaa tacagaggtg ctggttgggg agagcgtcac gctggagtgc 1140 agcgccacag gccacccccc gccgcggatc tcctggacga gaggtgaccg cacacccttg 1200 ccagttgacc cgcgggtgaa catcacgcct tctggcgggc tttacataca gaacgtcgta 1260 cagggggaca gcggagagta tgcgtgctct gcgaccaaca acattgacag cgtccatgcc 1320 accgetttea teategteea ggetetteet cagtteactg tgaegeetea ggaeagagte 1380 gttattgagg gccagaccgt ggatttccag tgtgaagcca agggcaaccc gccgccgtc 1440 atcgcctgga ccaagggagg gagccagctc tccgtggacc ggcggcacct ggtcctgtca 1500 tegggaacae ttagaatete tggtgttgee etecaegaee agggeeagta egaatgeeag 1560 gctgtcaaca tcatcggctc ccagaaggtc gtggcccacc tgactgtgca gcccagagtc 1620 accccagtgt ttgccagcat tcccagcgac acaacagtgg aggtgggcgc caatgtgcag 1680 ctcccgtgca gctcccaggg cgagcccgag ccagccatca cctggaacaa ggatggggtt 1740 caggtgacag aaagtggaaa atttcacatc agccctgaag gattcttgac catcaatgac 1800 gttggccctg cagacgcagg tcgctatgag tgtgtggccc ggaacaccat tgggtcggcc 1860 tcggtgagca tggtgctcag tgtgaacgtt cctgacgtca gtcgaaatgg agatccgttt 1920 gtagctacct ccatcgtgga agcgattgcg actgttgaca gagctataaa ctcaacccga 1980 acacatttgt ttgacagccg tcctcgttct ccaaatgatt tgctggcctt gttccggtat 2040

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<210> 3666

<211> 4254

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (4255)...(2061)

<223> similar to gi3882261 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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tggaaccctc aggaattctg catggagaag gttcttgagc acttgattga accgtttctt
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aaatatette aggecatett etgggaagte teteageace cacactgagt aggagaaaat
                                                                     3060
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gtcattcagc ttctttacca attgacttcg tttctgtgtc aggtagtcaa tcagagctaa
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cccttcctca ttgagtacca cggtgagatc atcctggccc acagccactt ttccatctgc
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ctttccatcc acccttatta ggtagtagtc tctcttgaaa cccacacaga tagaattttc
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<210> 3667
<211> 4956
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3207)

<223> similar to gi5689469 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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ctgtccgggg agcaggaggt gctgaggggc gagttggagg ctgctaagca ggccaaagtc
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aagctggaaa accgtatcaa ggagctggaa gaggaactga aaagagtgaa gtccgaggcc
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ccagcgccag gccgcgatcc cctgacctgc gaccgcgaag gagacggcga gcccaagagc
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agccgggtgt ggatcctgac cagcaccctg accaccagca aggtggtgat catcgacgcc
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tccagcatcc ccgcggccag cgacagcgac taccctcccg gggagatgtt cctggacagc
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                                                                    1980
ccgtcctctg gcccccagcc tggcagcgag aacgggccag agcctgacag cagcagcaca
                                                                    2040
cggccagage cagageceag eggggaeeee aegggageag geageagtge tgeaeeeaee
                                                                    2100
atgtggctgg gagcccagaa cggctggctc tatgtgcact cggctgtggc caactggaag
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cagtgggatc tgagcaacta tcacctaatg gacctgggcc acccgcacca ctccatccgc
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cccctgcctc ggaggtcgag ggccagaagc tgcggaacgt gctggtgctg agcggcgggg
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gacccccgac cacctgaccc ccgcccggcc cgcggggtag ccagccaggc gccgccgccc
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ctcttctaac ctctcaacct gcagctttca cctgagtctg gcccctccag cgggcaggga
                                                                    3360
3420
atgctctcgg gacagtttcc cgggcagctc ctggccagct tccagcccag agtcctcaag
                                                                   3480
```

```
tecagggeae ettgggeeea gegeaggeag aateegaggt ggteetgget etaceetggg
                                                                   3540
cctcctactc cccagcaccc ctggaggagg caggggctcc ccgccgccga ggctgcctgc
                                                                   3600
cctgggccca cctctgcatg ctgctcatgg ggccaccctg cctcctgggc cctcactctg
                                                                   3660
cctaggggag ctgggccagg cactagcctt tgcccaggga ggtgggcctc aggctgccca
                                                                   3720
ggtgcctgca ccccagccgg ccttctctgg ggcctccccg tcgtcaagcc tctatcctgt
                                                                   3780
ctgtccccac cccagctgtc ccctgcccag ggagctggca taaaagcacg aggcccggct
                                                                   3840
ccctggggca gctgcttgag aacagagact gctaccccat cctgcccatg caggcaggct
                                                                   3900
cttgccagcc ccgttctgac ccgtgtcccc ccaggctctg cctgggcaga agactcacct
                                                                   3960
tggaggagtg ggccctggag tcctgtccct cccagaagcc cccagggtgg gatttctcag
                                                                   4020
gctgccaggg caggcccagg cctcaggaag aaggggaggc ccctggcctc tccqqqatca
                                                                   4080
gtectaggae acaggeteag ceteaggttg atgggggatg atgtgeteee ggggeetgee
                                                                   4140
tectgeacgg ggetecacgg ageceagete ceagacacge tactaagtge etagggttge
                                                                   4200
ccgctgtggc ctgctcccag ggagcaacag agaggccacc aagcagaggc ccgtggggct
                                                                   4260
gaggatggag ccgccccag ccgactccaa gcccgcagag ggcagacgcc accctggact
                                                                   4320
getetecetg eccagetggg ectetetgge ectaatteet aacetteeea ggeecaetge
                                                                   4380
4440
cagagaagca cagatcttgg ggagctgccc cacaagcccc gctggccacc gagggctgca
                                                                   4500
gccgctgcgc tgccggcttc tccccaccac cctqccacct ccactqtqat qtatqtccgc
                                                                   4560
tecetegtet gtteeceeag gatetegaag tgaeteeggg etgageagtg gggeggetgg
                                                                   4620
gggaggggtg acgattctcc tcaggctttg gccctgcaag caaacccaca tatctgctct
                                                                   4680
qtatgtaata aatgtcttaa cgtcgaaaaa aaaaaaaaag gggcggccgt tttaaaggat
                                                                   4740
ccttgggggg gcccaagttt acccgggctt gcaaggtaat agtttttcc ttataggggg
                                                                   4800
gcgtattata acctacctgg gaatcttggg aaagaaccct tacttggggg gggggacata
                                                                   4860
ttgggccaac ctccctacag aaattaaagg ctctagggaa aatataaaat tttaaagggt
                                                                   4920
ataaggggta aaactaccgg cataggctgg cgqctg
                                                                   4956
    <210> 3668
    <211> 1647
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1500)...(1127)
    <223> similar to gi536926 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 3668
ttttttttt ttaccttatt gaaaaatggt ttaataaata taattattaa ataaatgtta
                                                                     60
agactttaaa tactaaccca agaaaaattt aaaaatacaa attcagtaag acttttgctc
                                                                    120
taacaacaat ttttcaaaac gaatcaacaa caaaaaagta tccagtgttt cttttcttat
                                                                    180
gaagattatt aataaaacac agtatttggt aagcacattt taacagtatg cttgtctttt
                                                                    240
gtagggaaaa ggaaatttgg gtttgtctaa catcgtggga tccaatgtgt ttgatatgtt
                                                                    300
gtgccttggt attccatggt ttattaaaac tgcatttata aatggatcag ctcctgcaga
                                                                    360
agtaaacagc agaggactaa cttacataac catctctctc aacatttcaa ttatttttct
                                                                    420
ttttttagca gttcacttca atggctggaa actaqacaga aagttgggaa tagtctgcct
                                                                    480
attatcatac ttggggcttg ctacattatc agttctatat gaacttggaa ttattggaaa
                                                                    540
taataaaata aggggctgtg gaggttgata ttattaatag tgttatgcag aaaatatgaa
                                                                    600
tggcagggag gggcagagag aaaaatccat ttcttcattt aaatcaaatt ttaaaaatct
                                                                    660
```

tgaaccttag aatctaaaac ttacagtaat ttaaaaccaa ccaaaatcac atcctaattt

<210> 3669 <211> 2126

```
ttqtqaqccc tttctttca tgaaaaatta catattataa aacagaagtt tggggggaaa
                                                                      780
aaatctatgt tttaccatac aataagttga caaaaactgg agaaactaga acaaacaaat
                                                                      840
ccaactatgt agtactgaaa acaacaagaa aatggcttat ttcattaaaa acagtataac
                                                                      900
cattcattta aactgaatga ccagacttgc tgtctttaaa aacccaaact tgagattaac
                                                                      960
aaaaattaca gtatattttt aacattatac tgttaaaagc tggtgggagt tttaaaagtt
                                                                     1020
catttttaca gcttttgtaa gcatacaata ttactttaaa aaaatgactt ttactaggag
                                                                     1080
attcagcaaa acagatgtag gaatgttcca accatggctt gaaattatgc attacgatcc
                                                                     1140
aagcgaacat caatttctct gccactgatt tttatgccat tcattattct gcaggctttt
                                                                     1200
tcagctgatt ctggggagtc aaatctgact gttccacagc cttttgactt tccattctcc
                                                                     1260
atttttattt ctgcaaacat tacatgacat ttctgacaaa tatctggttg cctttggagc
                                                                     1320
ctattetete teteatteeg etteceattg gaccegataa aaateetega teeatatega
                                                                     1380
tgctcctttc cagtatagct cctatacctg gtcccattct atcaaagctg gaactcatcc
                                                                     1440
ggtccagtcc catccccatt cctccagtca cactgttcat gctacccatt ccaccacctg
                                                                     1500
gattttcaag aaaggacggg gggatttggg aattttgtgt ttttgtttca aaaacataag
                                                                     1560
gaaaaggaga agaggagaaa ggaggaaaag gagataaaca tttttgagaa agaaggggga
                                                                     1620
aattaatttg tttatataat taaatcc
                                                                     1647
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     \langle 222 \rangle (195\overline{4}) \dots (463)
     <223> similar to gi971461 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3669
ttttttttt ttccagagac aacttctaag tttctcttta tttcttttgg aaacaacctc
                                                                        60
cattetteat eteteaatgt agteetggee tagtgaaaaa gaaggetttt etttetggee
                                                                       120
tccagagact gcttcctttg taggaaaagg aacaataaac acttcccatt aggtttctgt
                                                                       180
ctccagatac caatcaggga atgactggcc aggactggaa cttaacggcc ttgagaacat
                                                                       240
gtgggatttg tctttgagcc ccattggctt gtgatgtttt cctctgtcct ccctgagaca
                                                                       300
gttgctcctg tcctgggggg gctctgcctc cacctcccag tccaggatgt ctgaggtggt
                                                                       360
tgcaggetge ttgctgccca gtttccagte tgttctqqte caqqaaaqca ccacccatq
                                                                       420
geoettgetg ettetggeag gggteeteaa gageteaeea tgteeeagtg etggeteatg
                                                                       480
agtgaggact cacatgggtt gacgacgatt teettgeegt teteggtgee ateacegaae
                                                                       540
atatctgtat cgaggcagag gtgggatgct atgtgctcga tgtgggaacc agttttggtc
                                                                       600
cattgctgtc ggtcatctcc attcttgcaa aggacaagaa ccactggggc gccagggaac
                                                                       660
aaggtgatga ctgacaggca cagctcctcc tggaggatct gctgggtgta tgtgaaggcc
                                                                       720
catacctggg actttgcatc ttcgcctttg accttggcac aggggctcaa ctttaggttt
                                                                       780
ggggtttett ggttgttetg cetttgagat tecaggeact tetgtetetg teggatattg
                                                                       840
cccttctgga tggaggactc cttggggatg ctgagttcag ggtagatatt ctccaggtac
                                                                       900
cacttgaagc tctggcagcg cagattette etcaggteca atetgetete aacatteeeg
                                                                       960
aagggcctct ccagggcgaa tggccgggca gcgtaatagt attgcttgta ttcatccatc
                                                                      1020
cacacttcag ctgtccgctt ggtgttcttt atatacgtgt tggcatttcc atcagggaaa
                                                                      1080
acgtaggggt gcttcttccg gaagacgtgc cccactcggc tgcaggggac gatctctagg
                                                                      1140
ctgcccccgc acatccacac tcggaaggag atttcaaagt tctccccacc ccagatgtcc
                                                                      1200
atgtccatat catatttccc caggtaatca aaccaagctt tgtcgatcac gaagagccct
                                                                      1260
```

<210> 3670 <211> 698 <212> DNA

<210> 3671 <211> 2146 <212> DNA

<213> Homo sapiens

<220>

<213> Homo sapiens

```
ccagctatga taggagtcct gatgggctcc gtggggtcca ggcgccgagc cttctgctct
                                                                     1320
ggggagaget geteceactg gaagtggagg etecagteaa acceeectet gageteegag
                                                                     1380
gcagactcga tgtaggtgaa ggtgtccagg ttaatgatat cgatcacagg gcacaccacc
                                                                     1440
cgcgtgtagt cctctttgac cctgtgcaac agaggctgga gccaqtccct qttcacctca
                                                                     1500
cagtggctgt cgaggaaagt cagagtggtg ccctgggcga tgtcagcgcc ccgaatccgg
                                                                     1560
gaccggacca gaccttgccg ttcattattg cgcaagcatt tcaccttggg caacttgatg
                                                                    1620
agetgtttac agtcatcagg gtcattgctg aagtcatcca ctaatatgat ttcccggatc
                                                                    1680
agatgcgtag gggtgcggtt taatacactg cggattggtc ctgagcagcg tggagcgggc
                                                                    1740
cctcgttgtg gaaggtgatg atgatgctag tgggtggaag gtccgtgcaa tacaccagca
                                                                    1800
gtgtgcatct cagatggcga gtgtccggga tggcccgatt gctggagatc cgctcactct
                                                                    1860
cccgctggtt gaaagcatac agcttatagg ggtcgtcacc aacqcqccac tttttqqcat
                                                                    1920
tcagataccg ccgctcatca aactggtccc acaggtcgtc ccagtcagcg tccgaaggct
                                                                    1980
taggggtctg cacttcaggt cccgtcggca cctccaactt cctcttggtt acccagaaga
                                                                    2040
acagcagcac cgtgatccag agcaccccga agactggcag aaccagccga cgagtcaggc
                                                                    2100
gccgcatggt cccctttgcc acgaaa
                                                                    2126
```

```
<221> misc_feature
     <222> (78)...(569)
     <223> similar to gi4150939 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3670
gcgctcctgg ccgtggccct gaacctgctg gcgctgctgt tcgccaccac cgctttcctc
                                                                       60
accacgeact ggcgctctac agctgggaga ccggcgacga ccgcttcctc ttcaqqaatt
                                                                      120
tccacaccgg catctggtac tcgtgcgagg aggagctcag cgggcttggt gaaaaatgtc
                                                                      180
gcagcttcat tgacctggcc ccggcgtcgg agaaaggggt cctgtggctg tctgtggtct
                                                                      240
ccgaggtgct gtacattctg ctgctggtgg ttggcttcag cctcatgtgt ctcgagctct
                                                                      300
tocactocag caatgtcatc gacgggctca agctcaatgc cttcgcggct gtcttcacgg
                                                                      360
tgctctcagg cctcctggga atggtcgccc acatgatgta cacqcaggtg ttccaggtca
                                                                      420
ccgtgggcct cggtcctgag gactggagac cccattcctg ggactacggg tggtccttct
                                                                      480
gcctggcgtg gggctccttt acctgctgca tggcagcctc tgtcaccacg ctcaactcct
                                                                      540
acaccaagac ggtcattgag ttccggcaca agcgcaaggt ctttgagcag ggctaccggg
                                                                      600
aagagccgac cttcatagac cctgaggcca tcaagtactt ccgggagagg atggagaaga
                                                                      660
gggacgggag cgaggaggac tttcacttag actgccgc
                                                                      698
```

```
<220>
<221> misc_feature
<222> (2140)...(1996)
<223> similar to gi2580578 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3671
ccactgtggc gtttgatcga taaacgcaca tgcgaggtgg agggtggctg gtgtgtaatg
                                                                       60
tgcccggcag ccttcatagc aaaggagaat tctagaacca accgaagtgc ccctctgaag
                                                                      120
ggagctggtc ccgtccgttc cagccgccgt ggagtaacac agccaqcagt ttccctcctq
                                                                      180
ccacgaaagc tcgagactga aactcaggat gaactgtttt cagcccgggt caccccagcc
                                                                      240
ctggggtgga ggcccattga ggatggccga gcaggggggg gcatccaggc aggtccagca
                                                                      300
gtcctggcgg gctgaggaga aggaggtcag tgctcaggga gacatccgca gagggacctg
                                                                      360
gcaggcagag ctccagaagg gagggaactg cacagacaga aagctccaga aggctgcctq
                                                                      420
agggcctctg aggcctccgg agtcaggcgc catgcatgtq qaaqgtqqac tcttcagcat
                                                                      480
ggatgggacc ctagggggct gtggaccccc ggcccctggg actcacaggt gggagacagg
                                                                      540
agttccaacc gccaggggga gagtcctgga ggatcctggg ctgttggcag ccacccagca
                                                                      600
gggcccgtcc tgggagtggg gctggactct tcctgcagga aaggctgggc tggacctgct
                                                                      660
ctgagaggct tcagaaccag ccacacgaag accaaagtga agagcaagga gctgaactcc
                                                                      720
acgcagaaca cagcgcagcg tcctttaaag gaaggccaaa aacaacccaa caaaaatgcc
                                                                      780
aggtgatcaa agcggtcaca gcacaatgtc cacatccaac gagaaattgc tactacgtcc
                                                                      840
agacgcaggg aaaggtggcc gtgggaacgt gagtcagcag caacaggccc agaagggcag
                                                                      900
ccacggtgga cttgtcagac gtggaccctg aaatgacaat cacagcatga tttcaggcag
                                                                      960
gagcctgaaa tggtacagct ttggacatcg gtttggcaaa ttcttttaga gagaaacaca
                                                                     1020
caccttccct aggacccagc aactccactc ctaataacca agtgaaatgg aaggagttgt
                                                                     1080
cctcagcaaa acgtgtgtgc ggaagttcac agtcactttc tcggtgataa ccaagagctg
                                                                     1140
gaaaccactg caacacccac cagcaggtga acggattaac acactgggct agggccacac
                                                                     1200
aatgagatgc tccgtggcaa cacaaaatga accgtggaca cacactgcac ggcggatgaa
                                                                     1260
tatgcagaca tcaggccacg tgaagggagc caggccccga ggcgccacgc tttgtgattc
                                                                     1320
agggtggtcc ctctgcgccc aagacccggc tgcctcctcc tcttcctggc tgcagggagt
                                                                     1380
gcttgtgtct gaagaacgcc aggctggtgt ccccagaggg cggctggagg ggctcagaaa
                                                                     1440
ccattttcac cttctgtctc ctccatgtct gcactgtttg ggtttgtacc cqcctgtgtc
                                                                     1500
gcttttgcac gggaagtgag atggagagac acgtgaacca ccattgctgg ggttccagca
                                                                     1560
tggggcccca ggggacccat ggctttccca gaaggaagct ctgccattgg acagccggtc
                                                                     1620
tcaggctgct gcacaggccc ctccccgccc tcagccctgg cctgcgggaa tcaggaaagg
                                                                     1680
gtggggtcca gctgcattgc gaatggacta aagccactga tttgcacact tgccaatggc
                                                                     1740
tgaaatggtc aataaaacgt catgtacctt ttgccacagg aaagaaagca cgcaqccaaa
                                                                     1800
gagcgcaaag aggctcagag gaggcccggg tgccctggag agacgctgcg gtcctgacga
                                                                     1860
cacagcatcc ctgtccgcca gcggagattt tcccagataa agaattcccc ggcgggagac
                                                                     1920
agggccctgc acacaggtcc tttgccatgc tgctcaccat gcctgtgtgt tatctcccca
                                                                     1980
tgaaaagtca cctaggccga gcatggtggc tcacqcctgt aatcccaqca ctttqqqaqq
                                                                     2040
tggaggcgtg cggatcattt gagatcagga gtttgagacc atcctgagta acatggtgaa
                                                                    2100
accccgtttt taggaagaat acaaaaatta actgggaaaa aaaaaa
                                                                    2146
```

```
<210> 3672
```

<220>

<211> 1193

<212> DNA

<213> Homo sapiens

```
<221> misc feature
     \langle 222 \rangle (119\overline{5}) \dots (1011)
     <223> similar to gi299471 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3672
tcctagtcca tgtggaggaa ttcagcccgt taggacgtgg gaaggtccac aggtgggqcc
                                                                        60
gagtaaaggg ggacaggaga cgtgcggggc aggacctcgg ggctggatgc agaggccqqq
                                                                       120
gtggtggaaa ggggaggaga actgggcagg gcagataagt gggtggggcc tctggaggtg
                                                                       180
gcgggggcaa ggttggagcc ccgggacgaa gaaqqqacgc gggtcaqcqa qqcctqaaqa
                                                                       240
gtgggaggag atgggacccg gctgtagagt gcccagaggt ctaggccagg ggccgcgctg
                                                                       300
ccgcaggaag atgcgagagt ttggctttgg tgatctggtc cacccggggc cagtcttgcc
                                                                       360
ccctctgcca ccgcagcgta gggcctcctg cattccgttt ctctggccgg aagggtctag
                                                                       420
tgttcatccc tctcaggctt tggcctcctc ccactctccc gccctggggc ccattcgttt
                                                                       480
aggaagaatg ggagagccgg tcgtggcccc tgggcggggt aaaggaggga ggcttggtaa
                                                                       540
acctctgctg gggaggaccc agtacagtgg cagctccttg tcggggaaag aacggatctg
                                                                       600
gggaaagaac ggatctgcgt cacacgctct tacaggggaa ccctaagggg cctgaggggt
                                                                       660
agggcttggt ctccacccag agggaaggag aaatttttcg agtcgtaaag aaatgtatca
                                                                       720
gaagccatgg aacatttaca gccgcacacg ctgggtctcc caacaaacag atccccaaaa
                                                                       780
tattttccag tgctgtactc gtggcataga cccaqaccca cagaccagga ggaagcgcta
                                                                       840
gagatgtcaa cagccaacaa aaacagtgct ttacacactt gtaaaattgt gacctacagg
                                                                       900
ggctgggcac tgtggctcac gcctgtaacc ccagcacttt gggtggccaa ggtgggagga
                                                                       960
ttgcttgagc cccaggagtt cgagatcagc ctggcaaaca tggtaaaatc ctgtctctac
                                                                      1020
taaaaataca aaaattagct gggcgtggtg gtgcatgcct gtaatcccag ctacctggga
                                                                      1080
ggctgaggca ggagaattgc tggaacccaa aaggcggagg ctgcagtgag ccgagattgc
                                                                      1140
gccattgcac ttcagtttcg gccacaaagc gagagtccgt ctcaaaaaaa aaa
                                                                      1193
     <210> 3673
     <211> 2427
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (20)...(972)
     <223> similar to gillo9880 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3673
agacagttaa tgaggtctac aagctggtca tccccatcct agaagcgcat cgagaattcc
                                                                        60
ggaagctgac actcactcac agcaagctgc agagagcctt cqacaqcatc qttaacaaqq
                                                                       120
atcataagag aatgtttgga acctacttcc gagttggttt ctttggatcc aaatttgggg
                                                                      180
atttggatga acaggaattt gtctacaaag aqcctqcaat taccaaqctt cctqaqatct
                                                                      240
cacatagact agaggcattt tatggtcaat gttttggtgc agaatttgtg gaagtgatta
                                                                      300
aagactccac tootgtggac aaaaccaagt tggatcctaa caaggcctac atacagatca
                                                                      360
cttttgtgga qccctacttt gatgagtatg agatgaaaga cagggtcaca tactttgaga
                                                                      420
```

agaatttcaa cctccggagg ttcatgtaca ccaccccqtt caccctqqaq qqqcqqcctc

```
ggggagaget gcatgagcag tacagaagga acacagteet gaccactatg cacgeettee
                                                                      540
cctacatcaa gaccaggatc agcgtcatcc agaaggagga gtttgttttg acaccgattg
                                                                      600
aagttgccat tgaagacatg aagaagaaga ccctqcaqtt agcaqttgcc attaaccaqq
                                                                      660
agccgcctga tgcaaagatg cttcagatgg tgctgcaagg ctctgtggga qctactgtaa
                                                                      720
atcagggacc actggaagta gcccaagtgt ttttggctga aattcctgct gatccaaaac
                                                                      780
tctatcgaca tcacaacaag ttgaggttat gctttaagga attcatcatg agatgtggtg
                                                                      840
aagctgtaga gaaaaacaag cgtctcatca cggcagacca gagggaatat cagcaggaac
                                                                      900
tcaaaaagaa ctataacaag ctaaaagaga acctcaggcc aatgatcgag cggaaaattc
                                                                      960
cagaactgta caagccaata ttcagagttg agagtcaaaa gagggactcc ttccacagat
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ctagtttcag gaaatgtgaa acccagttgt cacagggcag ctaagaaaag ccatcttcat
                                                                     1080
tcqtggagac tgtggccctg caaccctgga gaaggacttg ctggtactta aaaaatggga
                                                                     1140
catttgccac ccaggactga ctgtacactc cctgatcagc cagcactctg gaagctttgg
                                                                     1200
gatcccagga accatggaat tattcccaaa tqqactctqa ccaqattttt qccatactqq
                                                                     1260
ggggtggcgg gatggaggat gggtactcag gcatgactgc gtatttatta aagtgtgttt
                                                                     1320
ttccacaatg taccaaacaa ggcataagca gcttctcctg ctgactggcc aatcactgcc
                                                                     1380
catctgagag atgatttcct ctggcccata tttgaattta ttggagtaac tcaaattgcc
                                                                     1440
tgaggaaaaa tggaaaaatt atccaccagt cgattcaaac tgaatttcac tctttatagg
                                                                     1500
aaggcagggc aaacttgtag gagtaccqaa acattttcaa taaatctaca aagggaagcc
                                                                     1560
ttactacaat tccaaaaatc atcatggttg gaaatttggg aggaggatta tttgtgaaac
                                                                     1620
ttgttaccct tttggtaatg gtggactaat ttgctgtata gttatttttg ttttattatt
                                                                     1680
actgttacca ttaattttaa catgcattta tagaagaata cattcaaagc actgatgtag
                                                                     1740
gagatacacg gtacttggag cagtcagcca aaaatcacag atactgcttt cacttaaatg
                                                                     1800
gaaacaattc tccgataatg ctttgctttt tttcttatgt cactcttgtg tactatctat
                                                                     1860
ttttctcctc tctgggacca agtttctttt tataaagcaa taatatctct gttttcattt
                                                                     1920
cagaacattg tgctgtctgt cagcatatgt atatcagcta caaaatatat tcaactttga
                                                                     1980
cttcttttga caaaggactt taggaaaaag aggaacaaag acattatttg agaattaaat
                                                                     2040
tatatatttt taatatgact gtgaccttga ctgataataa agatgtaata agaattgcaa
                                                                    2100
getaaatgtt teeetttgea aeteatgett tgtgttttgt tttgatgaee taetegeteg
                                                                     2160
taatgttttg taaggcactt cagagagaag acagatgcat catcctggcc tccatcaaat
                                                                     2220
aacactatcc aaggtggcac ctcttctgca atgtttaacc ctgctgttgt ccatttgggt
                                                                     2280
ttgtttttta cagtctcttt tgtaccacag tggatacatt tgcttcatga gtgcaggaac
                                                                     2340
catgttcact gctgcattct tacccctagc cctgggtcca cctagcctgt aagtgccccc
                                                                    2400
tgagggtatc aaagcacgcg gacttcc
                                                                    2427
```

```
<210> 3674
<211> 1766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1767)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1552)...(1077)
<223> similar to gi5824799 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3674
ttttttttt ttagaaaggc agatgatttc tttattgtaa agacagcagt tacaaaagag
                                                                       60
aataaatatg acattaggat atatttgtta aaaatacaac aaaaacccct agtatttgtg
                                                                      120
agcaacccca agaactcaca agtatggggg ataagaacat ctacaqctqq ataccctqaa
                                                                      180
acagatgtta gaaactggct aatggtgagt atggccatga ctttgggggat gtttgaaagg
                                                                      240
ccctggatct gtcacttggg aacgtcagcg gtctactgta atacaatttg cacagagtca
                                                                      300
qaqtgaacag gaaccctttt actcattggt atcctaacta ttctttcgtt cttacagtga
                                                                      360
agtagtacag tatttaagag tggggaaaag gctgagctgg gaagacatag acggagcaag
                                                                      420
gtgaagaggg agggactggg ggaatgctaa ggggccagga gaaaggtggc aggaaggagc
                                                                      480
agacctctgt cctttctcta atgtgtgtta ctgtggtggc atgctgttcc tcctgttgaa
                                                                      540
gagtggacgg gcagtggtcc acccagcctc cattaagacc caccattacc caggaacaga
                                                                      600
agatgcaaaa gcaactggca gaatcctacc aaagatgaga acagggaagt tgaatgtgaa
                                                                      660
gcagagagga gtgcagagaa ttctccgaga aaatqggcat tttctctgag gacccaaaaa
                                                                      720
gacagacata tctacacaaa ttgatatagc agactactct ttgatgggga atggtaaagg
                                                                      780
gacaaggaca aagtgaaggt tgctgagaag atacaagttc tggctataag aagggcagag
                                                                      840
gagcagaggc aggagacaga ggtgggcagg catctggccc accccaggac cctcctggag
                                                                      900
gggcttggac actgggagga atgaaggctg gcacgggagc tggcacgggg tggtggatgg
                                                                      960
agatgctggc tcagggaggg gaccgacagc agtgatgaag atgcctagtc atctcttctc
                                                                     1020
ggggcatctg tgaggcacag ctgtgggcag agggcaaggt cagcaggact atgtattgaa
                                                                     1080
gttggccttg agtttctgga aggctgcctg gcggagccgc ctctcctcct cctcccgctt
                                                                     1140
eegeteatet tgeteagett teaactetge tteaaactta etggeegatg acaaggettg
                                                                     1200
gaccttggct tcaaagaagt tcttggcacc tttgacaccc tccagggcca catcgatctc
                                                                     1260
agaaagcttt gccagcgcca tcagcccact gtcctcctgc agctcccctg ccgcggcctt
                                                                     1320
gtggaaaatg agcaggaact cccggaagct gagcttgcca tcgaagtcct catccacctc
                                                                     1380
cttgatcatg ctcttcaggc ccaggtgggt ctggggggcc cccagcttct ccatcatcag
                                                                     1440
cttcagctcc atcaggtcga tgaagccatc ccgcccagcg tcatacagtt tgaacatgct
                                                                     1500
ctccaggtcc ttgatgaggc ggcggctgaa ctccggggaa ctccgtgtag gggttgaaga
                                                                     1560
ccctgcagcg ccggggccgc gcagcgccct cgttgatgtc cagccqccqq ctcaqctqqq
                                                                     1620
egeteastee gegteggege tggeegtggg egeaegggeg ggaggetegg getegggett
                                                                     1680
gggctccggg gctggggcgc cgaggggagc cagctggggg ccactctcct cggcckcccn
                                                                     1740
scgccgcagc cggcgctcca gcttgc
                                                                     1766
     <210> 3675
     <211> 2416
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2417)
     <223> n = a,t,c or g
     <220>
```

```
<400> 3675
tttttttttt ttttttca caagttatat tttattttaa cacgaggatt aacatatagt 60
```

<223> similar to gi1872200 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<221> misc_feature <222> (2383)...(2122)

```
tacaaggtca atacaagcct ccagtggaag ctctttattt ggtttaattc catctccaga
                                                                      120
gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc
                                                                      180
ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag
                                                                      240
gttaaaatag aattctggac ctttttaaaa agtttttgga tgatataagc acaggaggca
                                                                      300
gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt
                                                                      360
tttgacgtcg tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct
                                                                      420
ttqcqctqcq ctqqttagac aagccqcaqq cttatctcca cqqtqaqcaq gataaaaacc
                                                                      480
cccaaggaac agcccatgac aaccttctgt gcctttttat actttcccat cctacaaagg
                                                                      540
aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcaqggc
                                                                      600
aggttctttt aaaattagtc atcttacaac acaacagtat tctagcacgg tggcgaagtg
                                                                      660
acaggcggca gatacggggg aggaaggaga cgttcacggg aaattccaca ttctactcta
                                                                      720
tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca gagtaaatga
                                                                      780
tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc
                                                                      840
atggagccac gcagactggc ccggaagcaa cacccaggtt caacatttaa gagcactcgc
                                                                      900
tataacattc tttttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac
                                                                      960
ggggggatac aagcatatcc tatactgggg gtgacggtca ttcaaagagc aaattactqc
                                                                     1020
agcttatatc ttttccacta tgttgcaaga aatgaatcta tcctgaccca taatatgaaa
                                                                     1080
gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat
                                                                     1140
cctcgtggag tggagagtgg tccacttgac ttggtgaggt cagaagttcc tgaagatccc
                                                                     1200
tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat
                                                                     1260
gcacctgttg gtttgcaggg acagaggtgc ggccttgact cttctcaccc tqtqtcatcc
                                                                     1320
gggcttgtct ttcgtctgtc aagtcagtcc tcctgcgtga ctgatgggtg caccacgctt
                                                                     1380
aggtcacccg ttgcagggac cggaagtcca tggctctgcc gcaaccctga gcggtttgca
                                                                     1440
gtcccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa
                                                                     1500
gccacttcct cttcacctgc ctgggcctca gcgtctctgc gcttgtggtt tctcgtcccc
                                                                     1560
gagggctgac tgagctgctc cggaagggtg gtgtgtggtc aaccttggtt ggctgagagg
                                                                     1620
agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccg
                                                                     1680
tecetgteee tttggettet ataggaette ettgtettag atteataaac ageaagagga
                                                                     1740
actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgccc
                                                                     1800
gacatcatcc ccaggettee gtggegetet eggteaeagg agetttagge caatggttee
                                                                     1860
tettgaetgt ttttgeecea aatgagagga ggggetgett tgetttaagg egtggeggeg
                                                                     1920
gggggggggt ggtggccaca gattagggga cctcaggttt tcctcaaaaa cccacacagg
                                                                     1980
gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg
                                                                     2040
ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacgagagg cacggggtct
                                                                     2100
ttggtgatga aagtgctaac ctcggcgggg tgcggtagct cacacctgta atctcagcac
                                                                     2160
tttgggaggc tgaggcgggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa
                                                                     2220
cacggtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc
                                                                     2280
ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga
                                                                     2340
ggttgtagtg agccgagatc atgccactgc actccagtct gaacaataga gcgagactcc
                                                                     2400
cgtctcaaaa aaaaaa
                                                                     2416
```

```
<210> 3676

<211> 2416

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2417)

<223> n = a,t,c or g

<220>

<221> misc_feature
```

<222> (2383)...(2122) <223> similar to gi1872200 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3676 ttttttttt ttttttca caagttatat tttattttaa cacgaggatt aacatatagt 60 tacaaggtca atacaagcct ccagtggaag ctctttattt ggtttaattc catctccaga 120 gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc 180 ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag 240 gttaaaatag aattetggae etttttaaaa agtttttgga tgatataage acaggaggea 300 gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt 360 tttgacgtcg tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct 420 ttgcgctgcg ctggttagac aagccgcagg cttatctcca cggtgagcag gataaaaacc 480 cccaaggaac agcccatgac aaccttctgt gcctttttat actttcccat cctacaaagg 540 aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcagggc 600 aggttctttt aaaattagtc atcttacaac acaacagtat tctagcacgg tggcgaagtg 660 acaggcggca gatacggggg aggaaggaga cgttcacggg aaattccaca ttctactcta 720 tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca gagtaaatga 780 tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc 840 atggagccac gcagactggc ccggaagcaa cacccaggtt caacatttaa gagcactcgc 900 tataacattc tttttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac 960 ggggggatac aagcatatcc tatactgggg gtgacggtca ttcaaagagc aaattactgc 1020 agcttatatc ttttccacta tgttgcaaga aatgaatcta tcctgaccca taatatgaaa 1080 gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat 1140 cctcgtggag tggagagtgg tccacttgac ttggtgaggt cagaagttcc tgaagatccc 1200 tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat 1260 gcacctgttg gtttgcaggg acagaggtgc ggccttgact cttctcaccc tgtgtcatcc 1320 gggcttgtct ttcgtctgtc aagtcagtcc tcctgcgtga ctgatgggtg caccacgctt 1380 aggtcacccg ttgcagggac cggaagtcca tggctctgcc gcaaccctga gcggtttgca 1440 gtccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa 1500 gccacttcct cttcacctgc ctgggcctca gcgtctctgc gcttgtggtt tctcqtcccc 1560 gagggctgac tgagctgctc cggaagggtg gtgtgtggtc aaccttggtt ggctgagagg 1620 agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccg 1680 tccctgtccc tttggcttct ataggacttc cttgtcttag attcataaac agcaagagga 1740 actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgccc 1800 gacatcatcc ccaggettec gtggegetet eggteacagg agetttagge caatggttee 1860 tcttgactgt ttttgcccca aatgagagga ggggctgctt tgctttaagg cgtggcggcg 1920 gggggggggt ggtggccaca gattagggga cctcaggttt tcctcaaaaa cccacacagg 1980 gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg 2040 ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacqagagg cacggggtct 2100 ttggtgatga aagtgctaac ctcggcgggg tgcggtagct cacacctgta atctcagcac 2160 tttgggaggc tgaggcggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa 2220 cacggtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc 2280 ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga 2340 ggttgtagtg agccgagatc atgccactgc actccagtct gaacaataga gcgagactcc 2400 cgtctcaaaa aaaaaa 2416

<210> 3677

<211> 1495

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1498)...(732)

<223> similar to gi32093 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3677
tggccattta ggaaaaattg tccttgggga tcctctaaaa aatccttttg tgtccaatag
                                                                       60
caccttaaaa aacctgggcc ccagataatt gttgaacctc agatttagga aggaaaattt
                                                                      120
ccaagctgtc agctaaaggc agtttccccc atttcacaga atatgtggta gaagttccga
                                                                      180
gtaaggaatt ttttcagcag ccatgaaagc tccctgcata aggaagactc agtgtgcaac
                                                                      240
atctgaaagc agtattgcca gagcatgact gtggcaatga agcaaaatgt tccctccacc
                                                                      300
tatccctccc tcccatgtat aatgcttgaa gggtcagtcc ctgaaataag tagagagaa
                                                                      360
agtgtttgct gaaagagcta atacataagt caaccttcac tggtaccaat gaaggcttcc
                                                                      420
cagttcaaaa ttcaacaccc agaaaaggca gaaattttag ctttaaatta agtttaaatt
                                                                      480
ttcagttatc ccagtggact aggcatttaa atctgaggag ttccctgaga ttccatatga
                                                                      540
ggaaatgaaa aacattagct tgtggattaa atttaaagag actgtaagga gaaaaacata
                                                                      600
ttttatgaca tgcctcttaa ggactcctat tatttcaatg aatttgttac agttataata
                                                                      660
tgcttgtgat aaaaaggcat tatttattaa gaaatctaaa atgtaataat atttcaatta
                                                                      720
tatagtttta gagaaccttt cttgcccaac acttttctga tagcaagttg gacatccttg
                                                                      780
tttctgaggc tataaaccat ggggtttagt aatggagtga caatcgtgta tgtcaccgtc
                                                                      840
accagcctgt ctttgttgga cacatagttt gctgtaggcc tcaggtagat gaaggaagca
                                                                      900
cagccataat gaacaataac aacactgagg tgagaggcgc aggtggaaaa cgctttccgt
                                                                      960
ctgccctcag ctgagggaat cttcaggata gtcctcagaa tgcagaaata agaaacacag
                                                                     1020
ataaacagaa agggaaccac aagtacaaga actccacaaa tgaatatcac aaatccgtta
                                                                     1080
acatctgtgt tggtacaagc cagaagaatg actgctgaga tgtcacagaa gtaatgattg
                                                                     1140
actttgttgg tgctacaaaa agggaggctg aaaactaaat ttactactgt aagagaggcc
                                                                     1200
aagaagccac caattgcaca ggcagctgcc agttttccac acacctgcca gctcataaga
                                                                     1260
gtggggtaat gcagagggtg acaaatggca gcatagcgat cataacccat cacacccaat
                                                                     1320
agcaggcagt tggtaatggc aaaaccaagg aagaagaaca tttgaagagc acaacagttg
                                                                     1380
aaggagattg tcctggccac agaaagtaga ttgatgagca tcttgggtag aatgacaaag
                                                                     1440
gtgtagaagt ctcagatgtt gagagaaagc caggaagagg ccattggtgt gtgga
                                                                     1495
```

```
<210> 3678
<211> 5662
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (5664)...(456)
<223> similar to gi2662085 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3678

tttttttttt tattcacaaa caaaacagtg attaaatttt attccttttt gagttgtttt 60 gtttttattt ttaaatgaag tttccatctg tacacgttaa gaaaataaac aaaacaacag 120 gaagccattc tctgtgtatc ctccttggag gcaggaagga tggatctgcc gataggcaca 180 caacagcaca cagccagggc tcatgggagt gagtgcccgt cacctcacga aggtcatggg 240 cctaaaacat acggaggctc catagaaaat gctccagctg gctttgcagt catgcataaa 300 ggtgaggaca cttaattcaa ggcatctggg ggctggtgtc accgcacatg aagagtagtg 360 cccatgctgt cccacgagct tccttgggaa aagggaaaaa caaatctttt cctcaaatag 420 aattgtcgca ggaaagagcc atgacatttt attcactgtt taatcatcgg gtggcaggat 480 ttctttgaag tagaatctgg tagtacccct cccaatcttt gctggatcac ttctaaatgg 540 tgaatatact ctgtcaagga atgttctgga tcttgagaag cagtcaggga tctttctaat 600 cttgaatttg gggatggagt ggctcttccc ccactgtgtg gggaggctgc tgctgccaqt 660 ctgcggcctc tggcagggtc cctggtgtgg ccagagggta catcccgggt tggggggac 720 tctctggttc tgggtggaga ctgcggctgt cgtgctcggg gccctgggcg aggggctttg 780 ccttgtgcca gagctccttt ccgatctact tcttgccatt tcttaaccaa aaaacgtaat 840 cttaatattg caatgaccac cctgacggcc gtgcggaacc tggtgaaagg acgagatgtg 900 attttccgtt ctgctttgga aggaaatacc cccaaatggg caatcatgga gagtgtttct 960 tgttcagaat cctggaatcc accaatcaac agcaaaagat acttcttttg ataaatcaga 1020 gcttttctaa agctctctgc tctcaagtaa tgcaggtaca atttttccat cttgacattg 1080 ctggtgtgtg cttcctcgct ggcagctggt ggaagccggc cggggtctgg gcgcctcagg 1140 gaactctgtg gagccgtttc gtctggcttc caagcagacc tttccgacct gcttgggctg 1200 cagcccttct gcagatggtg cttcagcaac ttctcaagct tagacacggc tctgctcagc 1260 tccagcttct cctgggtcac cgtgctgagc gcttttgtga gggaaacatt gtctttcagc 1320 aggacgtcca caaactggaa ctgcagctct gctgccattt ttttctggga ggaggtgggc 1380 ctgctcaagt cagactccag ctcctccaac gtgtgcagta aagacatcac tgctttctca 1440 ttggatgacg tccaatcatt aactgtcctg tccacggcct ggctggtgaa gctggtgaga 1500 agccgggcgg cagagagcag ccgctgcctc atcgcctcca gctctcgctg ctgttcccgg 1560 aggtggtccg catccgagcc ggcagccctg cgggcagaac ctaggtggag gcggctgcca 1620 ggcacctcgt cettegacte caggtetete actgtetget gaagetgett gatettatge 1680 aagtcacgct gacgctgcag ttctaattct cgctccttct ctctcctgag cgcctcacag 1740 tgcttctgag cctcagcctc aagctgctgc tgagaatgca gggcttgctg ctgcaccttt 1800 tcaagcatcg cttgcaagtc caccacccgg gacttctcct ccttcagctt ctgcagcaga 1860 gcgtgatggg cctgtgtgtc ctggtgcacg caagcctcct gtgtcctctg gctcagctgc 1920 tcggtcagga gccgctcgtg ccgcaaggcc tctgacagct ccagggtgcg gctcttctca 1980 gccgcaaggt ccttctggag ctcagagagc tggctccgct cctgagccag caaggcctcg 2040 cagcgtgagt gctcgatacg cagctccttc tgcaggttgt ccttggccgt ctgctcgtgt 2100 ttcagtgcca cgcagagtcg actgctctga gcacgctgtg tctccaaaga cgcccgcagc 2160 tcctccaggg ccttggcact ctggctctcc ctctgcaggt gccgcagctg ctcctcctcc 2220 agctggctct gcagggcacg ccccttcccg tgctcactct ccagctcctg aagcgcggcc 2280 ttcagetegt teteettact geteageatg gateteaget ggaggaeete etgetgeace 2340 tcgcagaggg accgggacag ctgttcgctc ttctgcctgc tctcacagag gtcggacttc 2400 aaatctegea etacagtetg eteegeegee aggagettet geaegetgtt tgeettetet 2460 tgctcttcac tcagcgtctt ctgcaagtcc ccagcaatgc acttctcctg ctctacttta 2520 taagccagca gttcaacctg cctgcgcagc tggtgctcct gctggctccc gcqcqcctct 2580 gcgcttgtca gcgccgtgcg caagtgctgc agcttctcct ggttctgcag gtgcgtcatg 2640 egeatgetgg geacgeageg cetggatete ggacageagg etgeteeggt eeggeaageg 2700 aagatgctcc agggactttt cctgcaggtc tccctgctca cggatgatct tctccagcct 2760 ttcgagcagg gagctgtgac cccccagatc tgagccactg agtcggggct gcagctcaac 2820 eccetgeate teetgetett ttteaaagge etettgeaca acetgeagaa ggteecetet 2880 ccaatcgggg cacgcggtgg gcacttcctg cgtctttccc ccatggagcg agatgtcctg 2940 tatctcgtct tccttccggg gtgggtgtgg ctcgccgctt gggggtgcaa ggccttctga 3000 cagcgccagg ataaggtggc tctcgtcacg caccatctgc agtaaagcct tcacgtgctt 3060 cggacgcact tccttctcct tcatggcttc cggcagcggc tgaaaccttc cagagatgga 3120 agcaggggtc acaggaccag cagtttgagc ctcagggcct cctgaccccg ggctcagtct 3180 tgctccaaaa cccgagccgt cacttttctc acttctatca gcttttcctt ctaatccagg 3240 aggaggtgaa cttaatgttt cttgagaatc aaaggatgtt gtgataaaat cttcgacatc 3300 tttctccaca gccgtcctct gcacatggtg gtcgtcagcc ggcggagact cggcccactg 3360 cagtgccage getgetgeag acaegeetgg ggaacaaage ageeeeggee cetgggtetg 3420

```
tggcagcgag gtgtccgccc tgtcccccag ggatgtgtcg gcactgcaca ggctcagggc
                                                                     3480
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gccagcctga ctgtcgctga cttcgtgcac cacaggcccc atgagggaca gctcgtgctg
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gctactcatc tgctgtttct ttaacacctc tttatcctgt tccaqccctt tcacqatqtt
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ctcctccaga cgtttaattt cttcttcctg cattaacact tgtctatctg ccgactcttt
                                                                     5580
ctgtatagcc aattcattaa attcatccaa cttttctctc aacttttgtt gtaacaactc
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aacctctcca tccagcggcg cc
                                                                     5662
```

```
<210> 3679
<211> 2655
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2656)

<223> similar to gi2280485 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
gtagaaattt tacatttgag aaatgaactg cgagacatgc gtgcccagct gggcattaat
                                                                      180
gaggatcatt ctgagggtga tgaaaaatct gagaaggaaa ctattatggc tcaccagccg
                                                                      240
actgatgtgg agtccacttt attgcagttg caggaacaga atactgccat ccgtgaagaa
                                                                      300
ctcaaccagc tgaaaaatga aaacagaatg ttaaaggaca ggttgaatgc attgggcttt
                                                                      360
tecetagage agaggttaga caattetgaa aaaetgtttg getateagte eetgageeea
                                                                      420
gaaatcaccc ctggtaacca gagcgatgga ggaggaactc tgacttcttc agtggaaggc
                                                                      480
tctgcccctg gctcagtgga ggatctcttg agtcaggatg aaaatacact aatggaccat
                                                                      540
cagcacagta actccatgga caatttagac agtgagtgca gtgaggtcta ccagccctc
                                                                      600
acatcgageg atgatgeget ggatgeacea teeteeteag agteggaagg cateeceage
                                                                      660
atagageget eeeggaaggg gageageggg aatgeeagtg aagtgteegt ggettgeetg
                                                                      720
actgaacgga tacaccagat ggaagagaac caacacagta caagagagaa actccaggca
                                                                      780
accctgcaag agctagctga tttacagcag attacccagg aactgaatag tgaaaacgaa
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aggettggag aagagaaggt tattetgatg gagtetttat gteageagag egataagttg
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gaacacttta gtcgacagat tgaatacttc cgctctcttc tagatgagca tcacatttct
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tatgtcatag atgaagatgt aaaaagtggg cgctatatgg aattagagca acgttacatg
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gacctcgctg agaatgcccg ttttgaacgg gagcagcttc ttggtgtcca gcagcattta
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agcaatactt tgaaaatggc agaacaagac aataaggaag ctcaagaaat gataggggca
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ctcaaagaac gcagtcacca tatggagcga attattgagt ctgagcagaa aggaaaagca
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gccttggcag ccacgttaga ggaatacaaa gccacagtgg ccagtgacca gatagagatg
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aatcgcctga aggctcagct ggagaatgaa aagcagaaag tggcagagct gtattctatc
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cataactctg gagacaaatc tgatattcag gacctcctgg agagtgtcag gctggacaaa
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cccctgacag ccctgtcaga taagagacca aactatgggg aaatccctgt tcaagagcat
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ctgttaagaa catcttcagc cagccggcct gcttccctgc caagagtgcc tgcgatggaa
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gcacaggagg gagcgtcgcc agcctctctg atggctatgg gaaccacgtc tccacagctt
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tccctgtcct cttctccaac ggcatctgtg actcccacca cccgaagccg aataagagaa
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gaaaggaaag accetetete agcattggee agagaatatg gaggateaaa gaggaacqee
                                                                     2580
ttgctgaagt ggtgtcagaa gaaaacagaa ggctatcaga atattgacat tacaaacttc
                                                                     2640
agcagcagct ggaaa
                                                                     2655
```

```
<210> 3680
```

<211> 4410

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (1)...(4411)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4411)...(749)
<223> similar to gi4240217 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3680 60 ctttcaaaaa tttccccagg ttgtgaaaag gtttgccaac gactctcagg gggtgtggtt 120 ctaagctgca tcaagtgaaa caaatacaaa atgctgtccc tcctccctgg gctcggaagg 180 cagtgcactt tctccctctt aacagcccag actagacggg tgaggaggtc agtggcctgt 240 gacccagggc caagetggga gtgtcccgca tagccttttt ctctgaccag tggggggaat 300 tccatctacc cttgagggcg tgctgggctg gggccccgtt ttccacaacc agcacatgtg 360 ntggtgagaa aaaacccaag ggtagcttta tcaacagggc tgctggggcc ttaaataact 420 tgacagtgag tgttgggccg ggtcacagcc aggggaaagg acttaacaca qattgccctc 480 ccaagccccc actggctggg cctaatttta ggattaccac gggaaaaaaa gctttgatga 540 aagacaacag gaagtcaaca cagcagagag tggtgtggac aacccatgaa tgccagcctc 600 accgcattcc catgccccac agttaacgat gacaacaaca gcaataataa taataat 660 aaaacaaagg tacaggtgaa aagcagcgct tggggtgtgc tgctgcaagc tggggaaggc 720 gcgtgctcaa cttggatggg acacacctag tctttcttca agtccctgga ttcaaagagc 780 ttcaaccgtt cttgcaccgt caggccttcc ttcagactct tggacctgat gtttctgagt 840 tgccgggtga cacaggatct gtctttcttc aagaagtcag ggttgctttt agatttcatt 900 atatcatatc cggacaccgt ggcactgtca ggggacttct cccccagtgc ttccgttgca 960 gccttgagct gctccttcaa cctgctgatg tcacagtcag ccttagcctt cgcgatgctq 1020 agctctgtgt agatgtcttt gtacttgtca cttgcgtact tcttgtcccg cagtgccgtc 1080 tgcagctcat ccttgaggga gctaatctcc tgtttcaggt actgtatttc cgattccttt 1140 acccgcaata agacctctag ttcataggca tccttgccct gtgcaagggg tgacccagtg 1200 gcctccccac cgccgtcccc aatcaagcaa cgtccgcaac cgtqtqatct ctgcagccag 1260 gcggttgttc agctcctggt tgtgggcatt gagctcctgg ttctcacqct ggcactgccg 1320 cagggcctgc cgctcggcct ccagcgcctg ggccagatgg gcattctcca ggcacttctg 1380 cgagtactgc tccgagagga cctccaagtt ccacgctgca ccgactgcag ctccctccag 1440 gtactggcgc cgcagggcct caaacatccg aagttgacgc tgctgatctg ggaccgctgg 1500 ctcttctccc agtcccgctc catttcctcc cgqtqqqcqt tcttcatqqc ttcqatqqct 1560 gagatggtgg ccgctgtctc ctcggctagg aggcggtctt tctcttctcg aagtttctct 1620 ageteceget ggtgetgeet etggagatet teaatettee ttetggtgeg tttetteeat 1680 tgctgcaaac cctcgctcgc acgtggcctt aaggctctcc aagtccctct ggtacttctc 1740 acgcagtgtg gccgcgtcgc cctccaggtc cttgtgtccc agctcctccc gcatgacatc 1800 catctgggcc tccagctcct ggatgcgctc cctcagcccc gtcatggagt cagcctctcc 1860 ctgggtggcc tgccagttgg gggcaggggc tggcagggcc ttggggtgtg gcccctqqtq 1920 gaggcagagg gtgtcctgaa ggcacctcag gctctgcgag tagtgctcct gcagggtcct 1980 cagctcctcc tcgtggatcg tctgcagctc ccggaccttg agctggaacc tgtcctccag 2040 ggtctgtatc tgctcaccat gatgcctctc catgtcctgc ctgtctctga ccgaggcatc 2100 cagctggctc aggacccggc tgcgctcagc ctgcagtgtg ctctcggtcc tggtcagctg 2160 ctccaccaca caccgaatct cctcctcata cctgccccgc agggtgaaca tgctcatgct 2220 gtgcttgctc tetgcatect ceagacactg etgetgatgg tetagetggg eggeettgge 2280 cttgagctct gcattctccc tttcaacaat ggcgatcaca tccaggtact cgctcttctg 2340 cttgcggaga agctcctcat actcctccct cagggcccgg gctgcctgtg cctgctctga 2400 gcaggagggc tcccgggttt gccaggactc cttgcagagc tggagctcct tctcatattc 2460 tagccggatt ctgcaggacg catagcaaac ctgggcctga ataatggcat cctgaaccaa 2520 caatgaagaa tactgaccga ggcctcccaa acaagtgtta tacgagagac tctgggacac 2580

```
ctggagaagc ttctggcaat ctctcagcga ttccacaggt ggcagagatg gtaaggcagc
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aacaccaggt gccccttggt cgagtttggc tgtgccctgc tgatggccct ccctgtcaag
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cacttccact gactttgggg gcaccatgct gtcttcccta ctggggctgc catcaccgta
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ctettecece ggaggagece ceaggteete gteeteatee tegageettg tgtgtgggag
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gcctagaggt gccctagtgg cttggactgg ttggcctggg agcaaagtgc catccctttc
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ccttaaaatc tcttcttttg cctggagctt
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     <210> 3681
     <211> 2752
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (2)...(856)
    <223> similar to gi4406821 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
```

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cagccgcagc cgccgctgc gccgaacctt accctgtgtc cggggccaag cgcaagtatc 180
tggaggactc ggaccccgag cgcagcgact atgaggagca gcagctgcag gaggaggagg 240
aggcgcgcaa ggtgaagagc ggcatccgcc agatgcgct cttcagccag gacgagtgcg 300
ccaagatcga ggcccgcatt gacgaggtgg tgtcccgcc tgagaagggc ctgtacaacg 360
```

```
agcacacggt ggaccgggcc ccactgcgca acaagtactt cttcggcgaa ggctacactt
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acggcgccca gctgcagaag cgcgggcccg gccaggagcg cctctacccg ccgggcgacg
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tggacgagat ccccgagtgg gtgcaccagc tggtgatcca aaagctggtg gagcaccgcg
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tcgtgtctca cgtggacccc atccacatct tcgagcgccc catcgtgtcc gtgtccttct
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aaccagtgct ttccctgccg gtgcgcaggg gaagcgtgac tgtgctcagt ggatatgctg
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ccttggtttt gttgcctgtt aaggctgaac aatagaattg gccaggacct aggttctcat
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taggctgcag aaatctgggg cagccaccat caagaagccc ctctcagggg ccagaactcc
                                                                     2580
tttgccagcg tggatttctc aagtcgggac tgcataatta aagcagttgc agttttattt
                                                                     2640
tttttacagc ttttttccca aaaatgattt atagttgtgt gtgcagcact tcgccctgaa
                                                                     2700
atgtgtgctc tacaataaac aaccaaatct aatatatttt gaaaaaaaa aa
                                                                     2752
```

```
<210> 3682
<211> 2354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (72)...(1700)
<223> similar to gi4691726 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3682
agccctgctc atggcagtga ggtgggctcc cagctgctga ggccacccag cactagtgag
                                                                       60
tgacttggca tttttatttt tgttcagatc acaagaatgg gcattacatc atcccacaga
                                                                      120
tggctgacag atctcggcaa aagtgcatgt ctcagagcct tgacttatcc gaattggcca
                                                                      180
aagctgctaa gaagaagctg caggcgctca gcaaccggct ttttgaggaa ctcgccatgg
                                                                      240
acgtgtatga cgaggtggat cgaagagaaa atgatgcagt qtqqctqqct acccaaaacc
                                                                      300
acagcactct ggtgacagag cgcagtgctg tgcccttcct gcctgttaac ccggaatact
                                                                      360
cagccacgcg gaatcagggg cgacaaaagc tggcccgctt taatgcccga gagtttgcca
                                                                      420
ccttgatcat cgacattctc agtgaggcca agcggagaca gcagggcaag agcctgagca
                                                                      480
gccccacaga caacctcgag ctgtctctgc ggagccagag tgacctcgac gaccaacacg
                                                                      540
actacgacag cgtggcctct gacgaggaca cagaccagga gcccctgcgc aqcaccqqcq
                                                                      600
ccactcggag caaccgggcc cggagcatgg actcctcgga cttgtctgac ggggctgtga
                                                                      660
cgcctgcagg agtacctgga gctgaagaag gccctggcta catcggaggc aaaggtgcag
                                                                      720
cagctcatga aggtcaacag tagcctgagc gacgagcttc cggaggctgc agcgagagca
                                                                      780
ctttgcaccc atagatccac aagctgcagg cggagaacct gcagctccgg cagcctccag
                                                                      840
ggccggtgcc cacacctcca ctccccagtg aacqggcgga acacacaccc atggcgccag
                                                                      900
gcgggagcac acaccgcagg gatcgccagg ccttttccat gtatgaacct ggctctgccc
                                                                      960
tgaagccctt tgggggcccc cctggggacg agctcactac gcggctgcag cctttccaca
                                                                     1020
gcactgagct agaggacgac gccatctatt cagtgcacgt ccctgctggc ctttaccgga
                                                                     1080
tccggaaagg ggtgtctgcc tcagctgtgc ccttcactcc ctcctccccg ctgctgtcct
                                                                     1140
gctcccagga gggaagccgc cacacgagca agctttcccg ccacggcagt ggagccgaca
                                                                     1200
gtgactatga gaacacgcaa agtggggacc cactgctggg gctggaaggg aagaggtttc
                                                                     1260
tagagctggg caaagaggaa gacttccacc cagagctgga aagcctggat ggagacctag
                                                                     1320
atcctgggct tcccagcaca gaggatgtca tcttgaagac agagcaggtc accaagaaca
                                                                     1380
ttcaggaact gttgcgggca gcccaggagt tcaagcatga cagcttcgtg ccctgctcag
                                                                     1440
agaagatcca tttggctgtg accgagatgg cctccctctt cccaaagagg ccagcctgg
                                                                     1500
agccagtgcg gagctcactg cggctgctca acgccagcgc ctaccggctg cagagtgagt
                                                                     1560
gccggaagac agtgccccca gagcccggcg ccccagtgga cttccagctg ctgactcagc
                                                                     1620
aggtgatcca gtgcgcctat gacatcgcca aggctgccaa gcagctggtc accatcacca
                                                                     1680
cccgagagaa gaagcagtga cctctctccc cacaccctca cctgcaccct aggacctcac
                                                                     1740
tggccatagg agctgggcca ctccagacat taatccccac cccaacagag ccactggcac
                                                                     1800
aagtgccctt agtgctgcca cactccctgg cagccaggtg ccctggtgcc cacccctgtc
                                                                     1860
gagcccctaa ggatggggag gtggggggc aggagcttct gtcccccaca ttccatqcac
                                                                     1920
ctcccctctg tatatagcat ctccccctc ctagtgagca ggggcctgca aggcatcact
                                                                     1980
cccagccct cgccttctag ggcaccctca gcaaaggggc aggtggggac actccaagtg
                                                                     2040
gggcagetet cegtacatge geeceaceee catgageeag tteageeeta etgggggetg
                                                                     2100
agegggggea tececteett tgtacatagt etecatggat gteeetgeee tgtageeaee
                                                                     2160
agccccttgc tgctctccct ttaatgccat atggcccctg cctagggcac aggccccaac
                                                                     2220
ctgtgtgctg gggtccccag cagcaaacac tggaaagtct qtttttttt tttcttctt
                                                                     2280
cttccccacc ccttaatttt aactttgtgg taactgagtg cccccgcgtg cctgcgtgtt
                                                                     2340
gagtgtgtgg gcgg
                                                                     2354
```

```
<210> 3683
<211> 2547
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(2535)
<223> similar to gi452821 in the genepept database release 114,
```

<400> 3683 cgatttcgtc tgggctctcc gcgggtcaag cggactttcc tgttccgggg ccggaaggca 60 aaggtgctgg tggcgcgggg agtgcgcgtc aaggtgaacg aggcctaccg gttccgcgtg 120 gcactgcctg cgtacccagc gtcgctcacc gacgtctccc tggcgctgag cgagctgcqc 180 cccaacgact caggtatcta tcgctgtgag gtccagcacg gcatcgatga cagcagcgac 240 gctgtgggag gtcaaggtca aaggggtcgt ctttctctac cgagagggct ctgcccgcta 300 tgctttctcc ttttctgggg cccaggaggc ctgtgcccgc attggagccc acatcgccac 360 cccggagcag ctctatgccg cctaccttgg gggctatqag caatgtgatg ctgqctqct 420 gtcggatcag accgtgaggt atcccatcca gaccccacga gaggcctgtt acggagacat 480 ggatggcttc cccggggtcc ggaactatgg tgtggtggac ccggatgacc tctatgatgt 540 gtactgttat gctgaagacc taaatggaga actgttcctg ggtgaccctc cagagaagct 600 gacattggag gaagcacggg cgtactgcca ggagcggggt gcagagattg ccaccacggg 660 ccaactgtat gcagcctggg atggtggcct ggaccactgc agcccagggt ggctagctga 720 tggcagtgtg cgctacccca tcgtcacacc cagccagcgc tgtggtgggg gcttqcctqq 780 tgtcaagact ctcttcctct tccccaacca gactggcttc cccaataagc acagccgctt 840 caacgtctac tgcttccgag actcggccca gccttctgcc atccctgagg cctccaaccc 900 agcctccaac ccagcctctg atggactaga ggctatcgtc acagtgacag agaccctgga 960 ggaactgcag ctgcctcagg aagccacaga gagtgaatcc cgtggggcca tctactccat 1020 1080 taggacgete etagaatttg aaacacaate catggtaceg eccaeggggt teteagaaga 1140 ggaaggtaag gcattggagg aagaagagaa atatgaagat gaagaagaga aagaggagga 1200 agaagaagag gaggaggtgg aggatgaggc tctgtgggca tggcccagcg agctcagcag 1260 cccgggccct gaggcctctc tccccactga gccagcagcc caggaggagt cactctccca 1320 ggcgccagca agggcagtcc tgcagcctgg tgcatcacca cttcctgatg gagagtcaga 1380 agettecagg cetecaaggg tecatggace acetactgag actetgeeca eteceaggga 1440 gaggaaccta gcatccccat caccttccac tctggttgag gcaagagagg tgggggaggc 1500 aactggtggt cctgagctat ctggggtccc tcgaggagag agcgaggaga caqqaaqctc 1560 cgagggtgcc ccttccctgc ttccagccac acgggcccct gagggtacca gggagctgga 1620 ggccccctct gaagataatt ctggaagaac tgccccagca gggacctcag tgcaggccca 1680 qccagtgctq cccactgaca gcgccagccg aggtggagtg gccgtggtcc ccgcatcagg 1740 tgactgtgtc cccagcccct gccacaatgg tgggacatgc ttggaggagg aggaaggggt 1800 ccgctgccta tgtctgcctg gctatggggg ggacctgtgc gatgttggcc tccgcttctg 1860 caaccccggc tgggacgcct tccagggcgc ctgctacaag cacttttcca cacgaaggag 1920 ctgggaggag gcagagaccc agtgccggat gtacggcgcg catctgqcca qcatcagcac 1980 acccgaggaa caggacttca tcaacaaccg gtaccgggag taccagtgga tcggactcaa 2040 cgacaggace ategaaggeg acttettgtg gteggatgge gteeceetge tetatgagaa 2100 ctggaaccct gggcagcctg acagctactt cctgtctgga gagaactgcg tggtcatggt 2160 gtggcatgat cagggacaat ggagtgacgt qccctgcaac taccacctgt cctacacctg 2220 caagatgggg ctggtgtcct gtgggccgcc accggagctg cccctggctc aagtgttcgg 2280 ccgcccacgg ctgcgctatg aggtggacac tgtgcttcgc taccggtgcc gggaaggact 2340 ggcccagcgc aatctgccgc tgatccgatg ccaagagaac ggtcgttggg aggcccccc 2400 agateteetg tgtgcccaga agacetgccc gagetetgca eccagaggag gacecagaag 2460 gacgtcaggg gaggctactg ggacgctgga aggcgctgtt gatcccccct tccaqcccca 2520 tgccaggtcc ctagggggca aggcctt 2547

<210> 3684

<211> 2349

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (29)...(1151)

<223> similar to gi2674195 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3684
ageggeeget tgeeegggta eeeegatege egaggeeeeg gageetteet eegetgggge
                                                                       60
tcaggcagcg gaggagccgt cgggggccgg ctcagaagag ctgatcaagt cggaccaggt
                                                                      120
gaacggcgtg ctggtgctga gcctcctgga caaaatcatc ggggcccgta gaccagatcc
                                                                      180
agctgactca agcacagctg gaggagcggc aggcggagat ggagggcgca gtgcagagca
                                                                      240
tecagggetg agetgageaa getgggeaag gegeaegeea ceaegageaa taeggtgage
                                                                      300
aagetgetgg agaaggtgeg caaggteage gteaacgtga agaeegtgeg eggeageetg
                                                                      360
gagcgccagg cggggcagat caagaagctg gaggtcaacg aggccgagct gctgcggcgc
                                                                      420
cgcaacttta aagtcatgat ctaccaggat gaagtgaagc tgccggccaa actgagcatc
                                                                      480
agcaaatcgc tgaaagagtc ggaggcgctg ccagagaagg agggcgagga gctgggcgag
                                                                      540
ggcgagcggc ccgaggagga cgcagcggcg ctggagcttt cgtcggacga ggcggtggag
                                                                      600
gttgaggagg ttattgagga gtcccgcgca gagcgtatca agcgcagcgg cctgcggcgc
                                                                      660
gtggacgact tcaagaaggc cttctccaag gagaagatgg agaagaccaa ggtgcgtacc
                                                                      720
cgcgagaacc tggagaagac gcgcctcaag accaaggaaa acctggagaa gacgcggcac
                                                                      780
accctggaga agcgcatgaa caagctgggc acgcgcctgg tgcccgccga gcggcgcgag
                                                                      840
aaactgaaga cgtcgcggga caagttgcgc aaatccttca cagcccgacc acgtggtgta
                                                                      900
cgcgcgctcc aagaccgcgg tctacaaggt gccacccttc accttccacg tcaagaagat
                                                                      960
ccgcgagggc caggtggaag tgctcaaggc caccgagatg gtggaggtgg gcgccgacga
                                                                     1020
cgacgagggc ggcgcggagc gcggggaggc cggcgacctg cggcgcggga gcaqccccqa
                                                                     1080
cgtgcacgcg ctgctggaga tcaccgagga gtcggacgcc gtgctggtgg acaagagcga
                                                                     1140
cagcgactga gccgccccg ctgccaccca ccccattcct cgctccttcc qaacttcctc
                                                                     1200
tttcgcattc tctctcggct cgagctggct gagatttttc taaattgaaa acacgcccc
                                                                     1260
ctccccacac ctccaggaac tccactccca gtcttagagc tgttaggacc cgatggggag
                                                                     1320
gcagcccccg cagtggacag cccccgcttg gacacagtcc gagtggaatg ggaagggaat
                                                                     1380
ggtcaatccc tgtcctggtt gtccaagtcg ggatctcaga ggaaattgca gtgattccac
                                                                     1440
ggttaggeee eeetgggggg getgeettee eeteageete teeceaeaee aeeeaeeeag
                                                                     1500
ctgctgtcat tccgctcact gagctcttct tcattctcac cctgatccct gggggactca
                                                                     1560
aagccaaaac tgcccaaaga ggaaagattg aatcctaaag gggatccttg ccccatggg
                                                                     1620
aggcccccta ctagaaggac gtgaaagcag cttttggggg aaactgaggc agtggggaag
                                                                     1680
acagagcaga atgagccctc accetggctg ggggtccage acaggctgta tetgcagagg
                                                                     1740
gtcccagagg aacgctggag ccaagagaag ccctgggaag gaggggtggg gaacgacatg
                                                                     1800
catgtgaggg atggcacact gatgtgttta tgcacctgta cacaggagcg catggccatg
                                                                     1860
gctttggaaa ggagaatgga aaaatagaag aaggtcggcc gggcttggtg gcttaagcct
                                                                     1920
gtaaccccag cactttggga ggccgaggtg ggcggatcac ctgaggtcag gagttcggga
                                                                     1980
ccagcctggc aaacacccca tctctactaa gcgaaaaccc atctctacta aaattacaaa
                                                                    2040
aattagctgg gcatggttgc gcatgcctgt aatcccagct actttggagg ctgaggtggg
                                                                     2100
gagaattgct tgaacctggg aggtggaggt tgcagtgagc caaggtcqcq acactgcact
                                                                    2160
ccagcctqqq tgacagagtg agactccatc tcaccggacg gggatgagca tgcctgaaat
                                                                    2220
cggcgctcct ttttaggctg acctgggggg aaccgacttt aacctgggag gtggaggttg
                                                                    2280
tagtgttccc cttatgggac actgcactac aacctaggtg ggagagtttg gactccaact
                                                                    2340
cttcttagg
                                                                    2349
```

```
<210> 3685
<211> 3269
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3270)...(625)
<223> similar to gi2290534 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3685 60 ggggctttgg gatgctgacc cctctctgac ctggccgttt cgacctcagc cctgagttac 120 cctgcagcag gcatggacag gcggccgcct tgcctgtcgc agcttcctgg cagcagctgg 180 ccttgcctgg accagcctgt ctgccccagc ggccggacgt ggccagctgg aatccgtgct 240 gcgcgggcgc tccggccgtg gcagggacac ataggcccgc acatgcttag tttgttccag 300 ggcgtcccag tgacatcagg gaggggcaag gccaaggtgg gccacaggct ctcccagggt 360 aggacteetg agtggegeee teeegaaagg ggteetgetg geeecteace ettetgggge 420 cggtttcacc cacggggtgg gcagcaggag cacggagcgc ggggtgccac acacaggccg 480 gggggctccg cagaggaggc ccaaggtttt catgatcaga caatgcacat cctggctcca 540 ggtggacaga gcatggggat ggaggcagaa cgttctcaga cagcagtggc ctcctgggcc 600 gggaagccac gggtgtgtgg gggagccatg ggcgcaggga cacagaaggg cgtgcagcca 660 cactcatcca cgtgggtgta ggtgtgcagg atggctgagc cgttaggaca gtgcaagggc 720 accytetect cytygaeceg cetetectyy cageagytye actyytycty catygeetyy 780 gcctcttgct gagtacttgg acgcttccgg ggcaggagcc cctcgcagaa ggtgatgttg 840 acctcggtct cgcagccctg gtgccacagg gatggtcgtg ttgatgcgga cttggacagg 900 agtectecte acaggagtag cagcageegg tttteetgag geteceetg cagetggaca 960 catctgggca ggatgcaggc tgtggggtca gcaaatggac tccaccctca gcctcacaga 1020 ggtacacggt gcagttgtcc acatggctgt tgacccaggt ttcattcagc tggactggct 1080 ggccatcggg cgtgaggcag gcggtctgga cgcactcccc acagcactgc ccggccactc 1140 tettgtaete aaageeetgg ggacaggtag tattgttgea ggeateetee tgacattgea 1200 ccgttgggtc ctgggtgtcc ccagagaggc aggtacacat gtggcaggga agggcgcctg 1260 ggaaggttgc accaaccccg tagaaggtgc cattgtacga acacagctga ggtctgcagc 1320 ggaaggtggg acagcagteg eceteeteet gggtgeagat ggaeteetge eetqqeqqqe 1380 acacaggcag gctctggggg caggtggttg tgttgcacac gcacaccgtc tcggggcagc 1440 aggggttete ggcccggggc ctggtcacgg ttacgaagcc gggacggttg cacggcqqqq 1500 1560 acacgcagga ctggcagttg ctgacccacc gctccccggg aaatttagga aacccatcgg 1620 gtcccacgca ggggcaggcc tgcacgcaga tgcccatgtg tgcgttgaag aggatctggt 1680 cctcagggca gaagcagccc tccgccatcc cctccagctg tgggctctgg ttcctagagt 1740 tgcaggtggc aggctgtatg gggccgcatg gcttgtacac tttggtgggt gggcaggtga 1800 ggtcgcacag gccaccggtt gcacctcgcc agtcactgca cactccccgg gcgcggcaga 1860 gctctgcgta agcctccagg ctctggcagg gcacctcaag gcggcccctg cagtggtcgc 1920 tgatgcaggc gttgaagaat gggcccgggg gcagaagggt gtggcactca gcaaagacct 1980 ggctcagcat cagatcacag agcagctgtg gtgggcatgg ggtgggggtg ggtgtgctag 2040 acaccggggc tgcggggctg gcagtggggg gtgtgccagt cggggcccaa cagccatcct 2100 ttctgctgtc ggggaccagc cacgtcttgg ccatgtcctt gcaactggcg gcagtggttc 2160 cgtcccgctg gagacagtcg tccctctggt tgttggtgca ggtgccgcac tggccctcgg 2220 tgttgttgtg gaagaggctg tagggcagcc gggcctggaa cacttggcca ttgaaggtga 2280 cgctcacgcc cagggcagga atgtccacag ccatggtggt ggtccccagc acagacacaa 2340 gcacgccgtt cttgctgaaa ccgctgctca ccggaattgg gtcaaacagg atcaggccct 2400 cctccttccc atgcaccatg gtgacagtga ggacgatatc catggacttg tagtggatgc 2460 tgagggccgc gggggcagcg ggcggcagcg gcagtggcag aggccgtgca gtagtggttg 2520

```
tccaggtaga ggctgagatt cccaaagcgt gcatggatct ctctcatgag gacataggtg
                                                                     2580
cagttgcccc ggaaggtgta agaggtgccg tcaaaggtgg aatagtggga gccgccccac
                                                                     2640
atgctgcaga tgcactcgca ctcatagtgg aagtcacagg gctggctcgg gtccgacact
                                                                     2700
ttgatgggca ggtgcttgtt cacgcaggtg acgttggcca caggctttgg gtccagcagg
                                                                     2760
acgacacggt tgtcacccac gcacctggcc accgtgcagt tctccagggt ccaggtctca
                                                                     2820
ttcacctgcc ggagagggat ggcattgtca cagccagggg caggggaggg cgaggacagc
                                                                     2880
ggggcggagg acactggcgg tggggaggtg ggacaggcgc cctggaagcg gtcaatgtca
                                                                     2940
cagtgctgat tgcacactgc gtagaaatgg cagccggctc ggtcggtctt attgtagatg
                                                                     3000
acttccccgg gcgagaaaaa ctgtccaaat gccctgcaga agcagggagt agaaaagtgg
                                                                     3060
gagctgggga agccagtggg tctcagggtg gtgaggactg aggaggacac agtggacacg
                                                                     3120
ctgaaggttg gcaggctgct ggggagcact gcaggggtgc gggtggtccc cacggtggac
                                                                     3180
gagctgggaa ccgtggaggc agtggctgtg ggcatagtgg ccatggtggt caccactttg
                                                                     3240
ggggtgtgag ctgttcccag agtggagga
                                                                     3269
```

```
<210> 3686
<211> 3307
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (125)...(427)
<223> similar to gi4100164 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3686 cgcagagact atctgagtat ctcaagtgga tttatgttac catttcaaat aaggagttta 60 tatagcccgg gcaatgttaa ggtgttttaa taaaccaaag gacaaaaatt aagtaaactt 120 gaaagaatgt caactgaaat atctggggtt tttgaaaaca aaaataaaaa tttgccaagg 180 aaatacctat attgctcttt ggtgtaacgg gaaactgcgc tgcctgtagt aagctcatcc 240 ctgcctttga gatggtgatg cgtgccaagg acaatgttta ccacctggac tgctttgcat 300 gtcagctttg taatcagaga ttttgtgttg gagacaaatt tttcctaaag aataacatga 360 teetttgeca gaeggaetae gaggaaggtt taatgaaaga aggttatgea eeceaggtte 420 gctgatccta tcaacatcac cccattaaga atacaaagca ctacattctt ttatcttttt 480 tgctccacat gtacataaga attgacacag gaacctactg aatagcgtag atataggaag 540 gcaggatggt tatatggaat aaaaggcgga ctgcatctgt atgtagtgaa attgccccag 600 ttcagagttg aatgtttatt attaaagaaa aaagtaatgt acatatggct ggatttttt 660 gcttgctatt cgtttttgtg tcacttggca tgagatgttt attttggact attgtatata 720 atgtattgta atatttgaag cacaaatgta atacagtttt attgtgttac catttgtgtt 780 ccatttgctt ctttgtattg ttgcatttag tacaatcagt gtttaaactt actgtatatt 840 tatgctttct gtatttacca gctattttaa atgagctgta actttctagt aaagaattga 900 aaagcaaatc tcactaatga tacacagata gataaagcaa gtctatcaac attaaaaata 960 ctaaaaaata aagacacaca cagagcattt tagtgacatc cactacttat tgccgctatg 1020 agttagagtc tatcagtgtt cttgttataa ccccctattt tcaggggggt taaaaatcag 1080 ctttaaaaaa atacataaaa atttcatctt aaagcacttt cattttatac caacgtgaaa 1140 agtgccattt ttagaataac tttaaagctt aacaggtttc cttttaatat cctttttttg 1200 tgtgctcttt acttacacaa tggctttgtt ttgctttttc agccacaccc cttatgtgaa 1260 ctagtgcctt tgggtatcac gtaaaatttt ttccaaaggg ttactttaaa aatctgttac 1320 cacaattatg agatgatttt taagtgataa attaaacttc ttcttgtata aattctgccc 1380 agatctctcc acaagagctg agggtttcat aactttatgg cttaataaat gtatgacact 1440

```
gaaaagattt gagtgtgaat ctactgaaat cactataatg cacattgaag ctatgatggt
                                                                     1500
atttgagtag tgaggttact tttgatcgga gcaacataat gctcatagaa tcttctagaa
                                                                     1560
gaagagaaac aaagggattg ataaaatgct gagaactagt gattatatat ttttctgtat
                                                                     1620
ttacctgaca tttattttaa tgttcaaaaa gtaaacactt taagtttgat gtgttttact
                                                                     1680
ctctcattgt tttaagtaat tgccaactca gaatacatca ttcttaggct gaaatttgtc
                                                                     1740
tttccatttt ttaaggtgaa atagtactac cttacgtgat agcatacaaa gaagaaagct
                                                                     1800
ctagaaagag aaattatgga gaatgattat ttaaattaca attaaggaaa tgagaatatg
                                                                     1860
atcccctctt ccgagttgcc cacaaacttg cttctttgct tttgctccct gtaatagaac
                                                                    1920
tacttttcaa caaatctaat tttgcacggc accgttaacc atattttcac tacagcaaac
                                                                     1980
ttaqtqctat gggttttctt tttctttgtt ttttcttga tcacttgtat aggaaacaat
                                                                    2040
attttccagt gttatttgca tatatatttt gtccttccaa tatatgcatt acaqatqaaa
                                                                    2100
attaaatgtt atacctgaat tcttgggttg gggccaaaat attaaggctg gaaaataatg
                                                                    2160
ctgggtgtgg gatttgtttt aaaacaaagg cttttattta tggaacatgg catgtggaat
                                                                    2220
ctgggatatt gcctcttatt tttaagaaaa tggttctgtg aaaagtgaat gatatgtatt
                                                                    2280
tttccaaatg cttcatggtt aggagtcttc aagttccatg ttccccaqat ttgagatata
                                                                    2340
ctaaagaaag aaattcaaaa gtagctattt ggggcccaca aaaataacta ttattttagc
                                                                     2400
cttagagcct tacacttgtt tcatgaagag aaaggacttg cataaccaaa ataaacaaag
                                                                    2460
caagacaaat taaaaatatg tgggggagag atcagtgaaa agtggttttc ttaatgcagc
                                                                    2520
cctgctggtc cccattaaca attgcttgaa attcacatgg atgtaaaatt ataattgtca
                                                                    2580
ggatcttatt cagatgatct tttaaggttt aactggtttt gcttttgttt atctatatgt
                                                                    2640
caaaatactt gtaaattggg aacaaacttc tctcagcttc ttgaagttgt tcaactatcc
                                                                    2700
ttgccactgg aagaccaaac aaggttttca ctgctttttc ttttacataa tatgctgaga
                                                                    2760
attatttctt atgcttttta ctacaaacaa aattactcac ctggattaaa gattaaggcc
                                                                    2820
ttaatctgtt tagattatct ttaatctcca tgaaatcgtg aaataagaca agaatagtgt
                                                                    2880
ttcagctgta ggccatttta cagctaattg cccataaatt gtagcattta ttgacctgaa
                                                                    2940
gtactaagct aattgtcttg actactcaaa gcccctgaat tgttgtcaac tttccccttt
                                                                    3000
gtgttgggta gccctaacgt catttagctt gttgtctgat gcctccagta ggacacctcc
                                                                    3060
gatggagett tgatttetga geagegaaag etecetteet aagatgeate tegeatagge
                                                                    3120
tgcctatgat gaaggaccgt gcacctccac tccaacagag tgctgagttt aaaagttgac
                                                                    3180
ctgtgtttgt aatttcactt tcatcttgct taataaatat ctgctggatt ctttcattca
                                                                    3240
cttttttaca tttggattta tgtttttacc caaaggggtg ttcccctaaa aaaaaaaga
                                                                    3300
aaaaaaa
                                                                    3307
```

```
<210> 3687
<211> 2386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2387)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7)...(1041)
<223> similar to gi2795825 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3687

```
gtccgagagg agatggtttt tgaagccgtt ttgcgttggt gtctatcgtg ccgttgatct
                                                                     60
gagaagacca ctgttacatg agctcctgac acatgtgaga ctccctctgt tgcatcccaa
                                                                    120
ctactttgtt caaacagttg aagtggacca attgatccag aattctcctg agtgttatca
                                                                    180
gttgttgcat gaagcaagac ggtaccacat acttgggaat gaaatgatgt ccccaaggac
                                                                    240
taggccacgc aggtccactg gctattctga ggtgatagtt gtcgttggag gatgtgagcg
                                                                    300
agttggagga tttaatcttc catacactga gtgctacgat cctgtaacag gagaatggaa
                                                                    360
qtctttggct aagcttccag aatttaccaa atcagagtat gcagtctgtg ctctaaggaa
                                                                    420
tgacattett gtttcaggtg gaagaatcaa cageegtgat gtetggattt ataacteaca
                                                                    480
qttaaatatt tqqatcagag ttgcctctct caataaaggc agatggcgtc acaaaatggc
                                                                    540
tgtcctcctt ggtaaagtat atgttgtcgg tggctatgat gggcaaaaca gacttagcag
                                                                    600
cqtaqaatgt tatgattcct tttcaaatcg atggactgaa gttgctcccc ttaaggaagc
                                                                    660
cgtgagttct cctgcagtga ctagctgtgt aggcaaactg tttgtgattg gtggaggacc
                                                                    720
tgatgataat acttgttctg ataaggttca atcttatgat ccagaaacca attcttggct
                                                                    780
acttcgtgca gctatcccaa ttgccaaaag gtgtataaca gctgtatccc taaacaacct
                                                                    840
gatctatgtt gccggtggac tgaccaaggc aatatactgt tacgatccag ttgaagatta
                                                                    900
ctggatgcac gtacagaata cattcagccg tcaggaaaac tgtggtatgt ctgtgtgtaa
                                                                    960
tggtaaaata tatatcctgg gcggaagacg ggaaaatgga gaagccacag acactattct
                                                                   1020
ctgttatgat cctgcaacaa gtatcatcac aggggtagct qcaatgccca ggccagtgtc
                                                                   1080
ctatcatggc tgtgtgacta ttcatagata caatgagaaa tgctttaaac tctgaagaca
                                                                   1140
ggatacctca ccgaagaagc cacactgatc caagatggga ggttttaaaa actctacagg
                                                                   1200
gggaacttca catatctcct ttgtgccata tgcaaaaaat agtaaaaata ataatttggt
                                                                   1260
qcctttctcc tcaaaatatc aatctttcaa actataataa agcctttcct ataattgaaa
                                                                   1320
aaaaaaactt ttttgttaaa ggtaatgggg gttgttactt ggcctttgaa gagtgtacct
                                                                   1380
ttgtaagtat ttgtaagaag tctatgtgaa ttaggaaatg tctgtctgca taccttttag
                                                                   1440
gagcgtgtga atggtgtctt cacttattat gtatgtttat ctgtatgtat attccttatt
                                                                   1500
ttgtcatata tgtagagaaa attgcatgac ttgaggcatc atttaggttg aagaagttaa
                                                                   1560
tgcttagaat gcattctagg agaaaaaatc agttttaaaa acctttgttg ttaacaaagt
                                                                   1620
atatccagat tggttaattt tattgaaggg tttttttctg taattgataa aaatgtaatg
                                                                   1680
acaacaattc aggcatcata aaatactgaa ctattgtgac tttattctta gaattgctgt
                                                                   1740
cttacattaa acatgttttt agggggaagt taggtaggag atagaaaaat aagtgcccct
                                                                   1800
1860
aaaaatgacc cactatggct ctcaaagttt ttatgcatca tctcttcaat cctctaagaa
                                                                   1920
agcctctttt cttaacttga taaagcagtg gaaacccatt ttgcaatatt gttttgtgaa
                                                                   1980
aaacagggac agacagccag gtacagagac tcacacctgt actcccaact actcagcagg
                                                                   2040
ctggggcagg aggattgctt gagcccagga gtctgaggct acagtgagct atgaacgcac
                                                                   2100
acggcaccct agcctgggca acaggttgcg aaactgtctc aagagaaaag aaaaagaaaa
                                                                   2160
atagggatag gttttccttc ctagcccagt agagtttgac ctcattagta tggtgctttg
                                                                   2220
ggtgaggacc tcttccttga ttatcccact ttctagtgaa cagctaaaat tcctgagagt
                                                                   2280
ctctactgtt aaggtacctt taataggata aagcagggac cacctatctc agtggggtcc
                                                                   2340
attttctttt taaaattagt tatcttnaaa aaacttaggc agtagt
                                                                   2386
```

```
<210> 3688
<211> 3455
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (373)...(808)

<223> similar to gi3878110 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3688
agatatttaa gctatggttc cggtcccaaa cgattcccct tggtagatgt tcttcagtat
                                                                       60
gcattggaat ttgcctcaag taaacctgtt tgcacttctc ctgttgacga tattgacgct
                                                                      120
agttccccac ctagtggttc cataccatca cagacattac caagcacaac agaacaacag
                                                                      180
ggagccctat cttcagaact gccaagcaca tcaccttcat cagttgctgc catttcatcg
                                                                      240
agatcagtaa tacacaaacc atttactcag tcccggatac ctccagattt gcccatgcat
                                                                      300
ccggcaccaa ggcacataac ggaggaagaa ctttctgtgc tggaaagttg tttacatcgc
                                                                      360
tggaggacag aaatagaaaa tgacaccaga gatttgcagg aaagcatatc cagaatccat
                                                                      420
cgaacaattg aattaatgta ctctgacaaa tctatgatac aagttcctta tcgattacat
                                                                      480
gccgttttag ttcacgaagg ccaagctaat gctgggcact actgggcata tatttttgat
                                                                      540
catcgtgaaa gcagatggat gaagtacaat gatattgctg tgacaaaatc atcatgggaa
                                                                      600
gagctagtga gggactcttt tggtggttat agaaatgcca gtgcatactg tttaatgtac
                                                                      660
ataaatgata aggcacagtt cctaatacaa gaggagttta ataaaaactg ggcagccct
                                                                      720
tgttggtata gaaacattac caccggattt gagagatttt gttgaggaag acaaccaacg
                                                                      780
atttgaaaaa gaactagaag aatgggatgc acaacttgcc cagaaagctt tgcaggaaaa
                                                                      840
gettttageg teteagaaat tgagagagte agagaettet gtgacaacag cacaageage
                                                                      900
aggagaccca aaatatctag agcagccatc aagaagtgat ttctcaaagc acttgaaaga
                                                                      960
agaaactatt caaataatta ccaaggcatc acatgagcat gaagataaaa gtcctgaaac
                                                                     1020
agttttgcag tcggcaatta agttggaata tgcaaggttg gttaagttgg cccaagaaga
                                                                     1080
caccccacca gaaaccgatt atcgtttaca tcatgtagtg gtctacttta tccagaacca
                                                                     1140
ggcaccaaag aaaattattg agaaaacatt actagaacaa tttggagata gaaatttgag
                                                                     1200
ttttgatgaa aggtgtcaca acataatgaa agttgctcaa gccaaactgg aaatgataaa
                                                                     1260
acctgaagaa gtaaacttgg aggaatatga ggagtggcat caggattata qqaaattcag
                                                                     1320
ggaaacaact atgtatctca taattgggct agaaaatttt caaagagaaa gttatataga
                                                                     1380
ttccttgctg ttcctcatct gtgcttatca gaataacaaa gaactcttgt ctaaaggctt
                                                                     1440
atacagagga catgatgaag aattgatatc acattataga agagaatgtt tgctaaaatt
                                                                     1500
aaatgagcaa gccgcagaac tcttcgaatc tggagaggat cgagaagtaa acaatggttt
                                                                     1560
gattatcatg aatgagttta ttgtcccatt tttgccatta ttactggtgg atgaaatgga
                                                                     1620
agaaaaggat atactagctg tagaagatat gagaaatcga tggtgttcct accttggtca
                                                                     1680
agaaatggaa ccacacctcc aagaaaagct gacagatttt ttgccaaaac tgcttgattg
                                                                     1740
ttctatggag attaaaagtt tccatgagcc accgaagtta ccttcatatt ccacgcatga
                                                                     1800
actctgtgag cgatttgccc gaatcatgtt gtccctcagt cgaactcctg ctgatggaag
                                                                     1860
ataaactgca cactttccct gaacacactg tataaactct ttttagttct taacccttgc
                                                                     1920
cttcctgtca cagggtttgc ttgttgctgc tatagttttt aacttttttt tattttaata
                                                                     1980
actgcaaaag acaaaatgac tatacagact ttagtcagac tgcagacaat aaagctgaaa
                                                                     2040
atcgcatggc gctcagacat tttaaccgga actgatgtat aatcacaaat ctaattgatt
                                                                     2100
ttattatggc aaaactatgc ttttgccacc ttcctgttgc agtattactt tgcttttatc
                                                                     2160
ttttctttct caacagcttt ccattcagtc tggatccttc catgactaca gccatttaag
                                                                     2220
tgttcagcac tgtgtacgat acataatatt tggtagcttg taaatgaaat aaagaataaa
                                                                     2280
gttttattta tggctaccta tgtgtttgta agcaggtata ttgtatatta gtgtattagt
                                                                     2340
aatactagat aaatgaattt tgtctgggga ttaagattgg atagttaata gattaataca
                                                                     2400
atcttttaat tctgctctaa tgctagcaaa ttggaaaatg tttaagtctt tgacacttaa
                                                                     2460
atttatctat atttttaaca aagttcttga acttagtatg gcaccggaac ctgttttgaa
                                                                     2520
ttcagtcagg tttttactca agtaagtggt tgattttttt taagtcaaac tacactgaaa
                                                                     2580
cttttatcct tttcttagat taatcttact ttttaaatgt atttacaata tacagcaagg
                                                                     2640
tgattatttc aagagaatcc caaagtactt gaataagggc tattgtaaaa tttaaaagaa
                                                                     2700
atatttatat atacacatat atacacatac acacatgtat atatattc ttcataatgg
                                                                     2760
aggacaatgt tttgcaatat ataaatcatt ctatttttgt aaattgtata tcactttaat
                                                                     2820
tgaaaatgtt ctctactaat taatactgtg aaacaaaatt gatgttgttt aactagaagt
                                                                     2880
tatgagtatc ttaactgcct ttattccttt tcaaaaagga aaaagctgta gaacattttg
                                                                     2940
tagatgaaac tactgtttaa gattaatgaa ttaatattgt gaatgaaaat caaaatccat
                                                                     3000
actttaaagg taatcatgtt actaacaacc tatttttgaa ttcataaaaa tttctttata
                                                                     3060
aatgatgttt tgtgaacata gtaaaataga ccattatact atgtgtatgt ttgatacagc
                                                                     3120
gtcgccaaaa ctagtgttct ttattagtgc ctctcacaaa agatcctgga tggaggagta
                                                                     3180
agatgaaata ttatgctatt atatgatgct gtttgtaaag gtattaatgt actagtaagg
                                                                     3240
```

```
tgttaatgac aaggaattag tactattcct gttgtaaagt tagattttgc atattgtatc 3300 tatcaaaata tgtttgggtt tagattttaa gttgtctact gagcagattt ctgcattggt 3360 tttccagtcc tgttaaaagt ttagaaactt catatgtgtc atcacagctt ttgtaaagaa 3420 agtatcctta atattttatg acattctacc acaaa 3455
```

```
<210> 3689
<211> 1266
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(445)
<223> similar to gi4530441 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3689 gcacaggtct atgtccggat ggactctttt gatgaggacc tcgcacgacc cagtggctta 60 ttggctcagg aacgcaagct ttgccgagat ctagtccata gcaacaaaaa ggaacaggag 120 tttcgttcca ttttccagca catacaatca gctcagtctc agcgtagccc ctcagaactg 180 tttgcccaac atatgggtgc ccattgttca ccatgttaaa gagcatcact ttgggtcctc 240 aggaatgaca ttacatgaac gctttactta aatacctaaa aagagggaac tgagcaggag 300 gcagccaaaa acaagaaaag cccagagata cacaggagaa tagacatttc ccccagtaca 360 ttcagaaaac atggtttggc tcatgatgaa atgaaaagtc cccgggaacc tggctacaag 420 gatgggcata attctaaaaa tgaactacaa agggttaatt tttattaaat qtatcaacaa 480 cctttgtgaa gtggttagaa tatggtaaat gaccccaaag tctattgagg tgagcttgag 540 aaaaaaaaga gaggagtttt ggaacaagtg cccatgatga gagaagaaac tttttgtgat 600 atttttctgc ttgtaagtat tatcaaatca actgtataca tgcactattt ccaaccatga 660 tttcagaaag acatgcatgt cagagaagag tgaaatattc atgtcttaac ttaagtagac 720 tgtttttaaa cagctggtcc agttttttt cctaacattg taccatatct atcatctgtc 780 aattactgtt actttaaagc taaagattac tttgatggcc cagctacatt tgcaatgatg 840 tgcacgtaaa cactgttaag aggttaaagc ttgtatacaa tctgttactg tgaaataact 900 aaattgggct ttaaaaaaat cttagtattt attgatcttc attcacatat acagttgaaa 960 tttaaaataa cagatggtta ttccaatgct gctgaaacct tttctaaaaa atacttgttt 1020 tgttggttga atgtgatgag aggcgcttct gggcagtctc tcttctctcc cacccgtctt 1080 tectecteeg agtaceeett etecagettt gtactageea tgtaaaacee aaggttteet 1140 ttaaaacatc agaagagatc tcgtcctcca tgccccaaaa aagccaactc attggaggtg 1200 ttacccctgg gagcagtgtt gcatttgtct ttttgtcttt ttttgctctt tggaggatgc 1260 agaggc 1266

```
<210> 3690
<211> 1006
<212> DNA
<213> Homo sapiens
<220>
```

```
<221> misc feature
     <222> (8)...(370)
     <223> similar to gi1871612 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3690
qacatacact ttctgctttt cgttaatgat caattctctt gaccataatt cagggtctaa
                                                                       60
ttcttgaagc ttttggagaa ctaagggacc aactggacca agtcaaagaa qacatggaga
                                                                      120
ccaaatgctt catctgtggg ataggcaatg attacttcga cacagtgcca catggctttg
                                                                      180
aaacccacac tttacaggag cacaacttgg ctaattactt qttttttctg atqtatctta
                                                                      240
taaacaaaga tgaaacagaa cacacaggac aggaatctta tgtctggaag atgtatcaag
                                                                      300
aaaggtgttg ggaatttttc ccagcagggg attgcttccg gaaacagtat gaagaccagc
                                                                      360
taaattaaac tcagacccaa tcacctctaa aaaccaaaac cctacccctc tctctccctc
                                                                      420
tctcaatttc tctgctctct tggaaacatt ttgctgattt tgtgaattgc cagcgttgtg
                                                                      480
tgttttctgg gagcatcgaa gctctgtttc ggaagagctg tttcctcccc ccaccttttg
                                                                      540
tatttacttt gagactaaag actgaagaat aatctaaatt catactcaga caaaaaagg
                                                                      600
aattctggaa agaaaaccat tctggacact gtcataacac acatagatag attttcttct
                                                                      660
gagactcccg gagtcttctc gagctacgag accttcacag agacacgtgg cagccacact
                                                                      720
cacccagcct ctttatttca ccatcctgga aggaaactgt ctgtctaatg gtcacagagc
                                                                      780
actgtagcac ttaacagatt gccatggaca ccagttgcga agggaaatag tgccttacta
                                                                      840
tatgtgggtt gagctatgca gaagatacgt gcatgaaaaa acatctttat tttctttatg
                                                                      900
togacctttc ttttcttaga ttgattttgt gaggtttttt ttttttcctt tagccttttc
                                                                      960
tttagggggg gagggtaaaa aaagcagttt gcccttaaaa aaaaaa
                                                                     1006
     <210> 3691
     <211> 2781
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (6)...(1437)
     <223> similar to gi1503988 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3691
atctcagagt ggcggaattc gccgggacca gccgctcggg gccgggctga tacagccqct
                                                                       60
tcaccgtgcc cctgcccgcg accatggcct cctccgaggt ggcgcggcac ctgctcttc
                                                                      120
agteteacat ggeaaegaaa acaaettgta tgtetteaca aggateagat gatgaacaga
                                                                      180
taaaaagaga aaacattcgt tcgttgacta tgtctggcca tgttggtttt gagagtttgc
                                                                      240
ctgatcaget ggtgaacaga tecatteage aagggttetg etttaatatt etetgtgtgg
                                                                      300
gggaaactgg aattggaaaa tcaacactga ttgacacatt gtttaatact aattttgaag
                                                                      360
actatgaatc ctcacatttt tgcccaaatg ttaaacttaa agctcagaca tatgaactcc
                                                                      420
aggaaagtaa tgttcaattg aaattgacca ttgtgaatac agtgggattt ggtgaccaaa
                                                                      480
taaataaaga agagagctac caaccaatag ttgactacat agatgctcag tttgaggcct
                                                                      540
atctccaaga agaactgaag attaagcgtt ctctctttac ctaccatgat tctcgcatcc
                                                                      600
atgtgtgtct ctactttatt tcaccgacag gccactctct gaagacactt gatctcttaa
```

660

```
ccatgaagaa ccttgacagc aaggtttaca ttataccagt gattgccaaa gcagatacgg
                                                                      720
tttctaaaac tgaattacag aagtttaaga tcaagctcat gagtgaattg gtcagcaatg
                                                                      780
gcgtccagat ataccagttc ccaacggatg atgacactat tgctaaggtc aacgctgcaa
                                                                      840
tgaatggaca gttgccgttt gctgttgtgg gaagtatgga tgaggtaaaa gtcggaaaca
                                                                      900
agatggtcaa agctcgccag tacccttggg gtgttgtaca agtggaaaat gaaaaccact
                                                                      960
gtgactttgt aaagctgcgg gaaatgctca tttqtacaaa tatqqaqqac ctqcqaqaqc
                                                                     1020
agacccatac caggcactat gagctttaca ggcgctgcaa actggaggaa atgggcttta
                                                                     1080
cagatgtggg cccagaaaac aagccagtca gtgttcaaga gacctatgaa qccaaaagac
                                                                     1140
atgagttcca tggtgaacgt cagaggaagg aagaagaaat gaaacagatg tttgtgcagc
                                                                     1200
gagtaaagga gaaagaagcc atattgaaag aagctgagag agagctacag gccaaatttg
                                                                     1260
agcaccttaa gagacttcac caagaagaga gaatgaagct tgaagaaaag agaagacttt
                                                                     1320
tggaagaaga aataattgct ttctctaaaa agaaagctac ctccgagata tttcacagcc
                                                                     1380
agtcctttct ggcaacaggc agcaacctga ggaaggacaa ggaccgtaag aactccaatt
                                                                     1440
ttttgtaaaa cagaagttcc agagcacaga aggtcatcat cacaagcaaa ctttattaaa
                                                                     1500
aaaaaactag aagtgtgctt tgattttgct gttatttgtt ttatcacttc tatatttggt
                                                                     1560
gaacagccac agttactgat atttatggaa aagtactttc aagtacaagg tcaatacata
                                                                     1620
agccagagtg aatgatacta caagttgagc atctctaatt caaaaatctg aaatccagaa
                                                                     1680
gcttcaaaat ctgaatcttt ttgagcactg acttgacccc acaagtggaa aattccccac
                                                                     1740
ccgacacctt tgctttctga tggttcagtt taaacagatt ttgtttcttg cacaaaattt
                                                                     1800
ttgtataaat tactttcagg ctatatgtat aaggtqqatg tgaaacatga attatgtaat
                                                                     1860
tagagtcggg tcccgttgtg tatatgcaga tattccaaac ctgaaatcca aaacacttct
                                                                     1920
ggtccctagc attttggata agggatactc agcttgtacc tatatattca tatattca
                                                                     1980
ctgttgttag aaatgtttaa gttgctgttc tgtgatgaat ctaaatcttt tctcttgcta
                                                                     2040
ccaagctatt gtcactgcag tgcattatac caaagagcga agtcagtgcc actgaaaata
                                                                     2100
cagaacccat taatatcgtg gctatctgat tacatttata ttccaagatg aacctttttt
                                                                     2160
atatatgcta aaaattttgg ggaatatgtt ttgggatgta ttatggagct aaaactctaa
                                                                     2220
cctcttaata gttttataga acttaaaaat tttttataca attacccaat tggtgatatg
                                                                     2280
atcttaagct tttgtgtcag attatttaat atgatgactt catgctttat tatgccttat
                                                                     2340
tatggctgac gtattactgt ggtgaaacaa aatatcttta aaagttaaaa catccagata
                                                                     2400
tataagctat tttttcctaa ggataaagta cctttgagca tgagtgtatc acaqctttca
                                                                     2460
ttaggaaaac ttttcattac atacttgttt aaactctgtc ttccagggta aaaataataa
                                                                     2520
ggttgaatca ttttattaaa aatacttttt aagaaaataa ctatgaacat ctgaatatta
                                                                     2580
aagatataaa aatgcacata attcatattt caggtggtat ttgcattcag tgccttactg
                                                                     2640
gtattctcag aacattttaa tgatttctaa catttcttaa cagtcataga tatatacatt
                                                                     2700
ttcatttttt gtacttgaat attctaaata aaactgacat ttactcttga caaataaaac
                                                                     2760
atatatttac taaaaaaaaa a
                                                                     2781
```

```
<210> 3692
<211> 2548
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (202)...(1816)
<223> similar to gi3875448 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3692
cggaagcett ctctgggget gcaaggacet gageteaget teegeeecag ccagggaage 60
```

```
ggcaggggaa agcaccgget ccaggccage gtgggccget etetegeteg gtgeccqeeq
                                                                      120
ccatgtgggc cgtcctgagg ttagccctgc ggccgtgtgc ccgcgcctct cccgccgggc
                                                                      180
cgcgcgccta tcacggggac tcggtggcct cgctgggcac ccagccggac ttgggctctg
                                                                      240
ccctctacca ggagaactac aagcagatga aagcactagt aaatcagctc catgaacgag
                                                                      300
tggagcatat aaaactagga ggtggtgaga aagcccgagc acttcacata tcaagaggaa
                                                                      360
aactattgcc cagagaaaga attgacaatc tcatagaccc agggtctcca tttctggaat
                                                                      420
tatcccagtt tgcaggttac cagttatatg acaatgagga ggtgccagga ggtggcatta
                                                                      480
ttacaggcat tggaagagta tcaggagtag aatgcatgat tattqccaat qatqccaccq
                                                                      540
tcaaaggagg tgcctactac ccagtgactg tgaaaaaaaa attacgggcc caagaaattg
                                                                      600
ccatqcaaaa caggctcccc tgcatctact tagttgattc gggaggagca tacttacctc
                                                                      660
gacaagcaga tgtgtttcca gatcgagacc actttggccg tacattctat aatcaggcaa
                                                                      720
ttatgtcttc taaaaatatt gcacagatcg cagtggtcat gggctcctgc accgcaggag
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gagcctatgt gcctgccatg gctgatgaaa acatcattgt acgcaagcag ggtaccattt
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tcttggcagg acccccttg gttaaagcgg caactgggga agaagtatct gctgaggatc
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ttggaggtgc tgatcttcat tgcagaaagt ctggagtaag tgaccactgg qctttgqatg
                                                                      960
atcatcatgc ccttcactta actaggaagg ttgtgaggaa tctaaattat cagaagaaat
                                                                     1020
tggatgtcac cattgaacct tctgaagagc ctttatttcc tgctgatgaa ttgtatggaa
                                                                     1080
tagttggtgc taaccttaag aggagctttg atgtccqaqa qqtcattqct agaatcgtgg
                                                                     1140
atggaagcag attcactgag ttcaaagcct tttatggaga cacattagtt acaggatttg
                                                                     1200
ctcgaatatt tgggtaccca gtaggtatcg ttggaaacaa cggagttctc ttttctgaat
                                                                     1260
ctgcaaaaaa gggtactcac tttgtccagt tatgctgcca aagaaatatt cctctgctgt
                                                                     1320
tccttcaaaa cattactgga tttatggttg gtagagagta tgaagctgaa ggaattgcca
                                                                     1380
aggatggtgc caagatggtg gccgctgtgg cctgtgccca agtgcctaaa ataaccctca
                                                                     1440
tcattggggg ctcctatgga gccggaaact atgggatgtg tggcaqaqca tataqcccaa
                                                                     1500
gatttctcta catttggcca aatgctcgta tctcagtgat gggaggagag caggcagcca
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atgtgttggc cacgataaca aaggaccaaa gagcccggga aggaaagcag ttctccagtg
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ctgatgaagc ggctttaaaa gagcccatca ttaagaagtt tgaaqagqaa ggaaaccctt
                                                                     1680
actattccag cgcaagggta tgggatgatg ggatcattga tccagcagac accagactgg
                                                                     1740
tcttgggtct cagttttagt gcagccctca acgcaccaat agagaagact gacttcggta
                                                                     1800
tcttcaggat gtaactggaa taaaggatgt tttctgttgg acatgtactg aaaattaaca
                                                                     1860
catgtagtag ccttaaaatt ttagacttct cgaacatgag gctgttacag taatttttt
                                                                     1920
aacactgtgc attgtacttt tctaccttaa aaaaatcagt gaggatattt atttaatgaa
                                                                     1980
catcaattcc ttttaaattt tcttagagaa atttctctgt ggctcagttt taccacccat
                                                                     2040
aaagcggaga cagtaattta tggttatcct ttctgaccca caaagtatga aaagttctgt
                                                                     2100
aatctgtaaa ctcagttctg taatctgtat tattgagatg attaatataa agttgtattt
                                                                     2160
tcactgaaat gattgttttg ctggttatgc ttggtgatat tttagcgggc ttatttttga
                                                                     2220
aaggcatctg ttacttcagt ggcataaagt gccctcacac tgctgtgcag ccatcaccac
                                                                     2280
cattcatctc cagaatttgt tctcagtccc aaactgaaac tataccattc aaacaacagc
                                                                     2340
gctccccatt tccccctccc ccgagcccat gacatctcct tattattatt tttttttqa
                                                                     2400
gacagggtgt ttctctgttg cccaggctgg agtgcggggg ggtgatctcg gctcactgca
                                                                     2460
acctccgcct tccaggttca agcgattctc ccacctcagc ctcctgagta gctggaatta
                                                                     2520
caggtgccca ccaccatgtc tggccaag
                                                                     2548
```

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<210> 3693
<211> 3923
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (121)...(1223)
<223> similar to gi793845 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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cttgggccag agtggtgatg ccagaggcga gaagatgctg ctgagttctg gctatgtttt
                                                                     120
gccctggacc catccaagga cccctgcctg aaggtaaaat gcagccctca caaagtgtgt
                                                                     180
gtgacccagg actaccagac cgccctgtgt gtcagccgca agcacctgct ccccaggcaa
                                                                     240
aagaagggga acgtggccca gaaacactgg gttggacctt cgaatttggt caagtgcaag
                                                                     300
ccctgtcccg tggcacagtc agccatggtc tgcggctcag atggccactc ctacacatcc
                                                                     360
aagtgcaaat tggagttcca tgcttgttct actggcaaaa gcctcgccac cctctgtgat
                                                                     420
ggggccctgt ccctgtctcc cagagcctgg agccaccaaa gcacaagggc agaaagggag
                                                                     480
tgccttgcac agacaaggag ttgcggaacc ttgcctcccg gctgaaggat tggtttggag
                                                                     540
ctctccacga ggatgcgaac agagtcatca agcccaccag ctccaacaca gcccaaggca
                                                                     600
ggtttgacac tagcatcctg cccatctgca aggactccct gggctggatg ttgaacaagt
                                                                     660
tggacatgaa ctatgacctc ctgcttgacc cttcagagat caatgccatc tacctggata
                                                                     720
agtacgagcc ctgtatcaag cctcttttca actcgtgtga ctccttcaag gatggcaaac
                                                                    780
ctttcctaaa caatgaatgg tgcctactgc cttcccagaa ccctggaggt ctccccttgc
                                                                     840
ccagaatgaa atgaacagaa ttcaagaagc tgagtaaggg gaaaagcctg ttgggggcct
                                                                    900
tcatacctcg gtgtaatgag gagggctatt acaaagccac acagtgccac ggcagcacgg
                                                                    960
ggcagtgctg gtgtgtggac aaatatggga atgagttggc tggctccagg aaacagggtg
                                                                    1020
ctgtgagctg tgaagaggag caggaaacct caggggattt tggcagtggt gggtccgtgg
                                                                    1080
tcctgctgga tgacctagaa tatgaacggg agctgggacc aaaggacaaa gaggggaagc
                                                                    1140
tgagggtgca cacccgagcc gtgacagagg atgatgagga tgaggatgat gacaaagagg
                                                                    1200
atgaggtcgg gtacatatgg tagtgcccac aagaaagagg acacaagttt tgcacaaaat
                                                                   1260
tgcaagtcac ttcctattcc tgcatttgta tctaagactc caaggcacca aggtcttttt
                                                                   1320
tecattgttg etetetatae eegacetaag gtttggaaga caactgettg tteccagagg
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attctgattt tgcatatgtt tgtatgggaa aaagggtgtt gtgttttttt ttttgttgtt
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gtttattttt tggataggga agtcattggc ttaattagag cctccttcct ttctgtgaga
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tttttccaac aagcatgtga tttacgtgga attctgacag tgcagggagc ccccaccctc
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gtcaagactc cctttgggga attcatttta ttaaaaattg gtgtctggat acttccctgt
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acatgcataa atatgcatgc atgtacagaa agactgtatg tgtgtgcctt gcacacaca
                                                                   1920
ccatacctct cagaaaaagt gggtatctta aaaactcgaa aaacaatgat aaatttctca
                                                                   1980
gcttgtccag acctggaaca aaatttctgg aataagaaat ttgtattaaa gtccttttt
                                                                   2040
2100
agagttactg aaagcctctg attgagaaaa aacctccgtc tgcctaaatc acttttctcg
                                                                   2160
cagaagccat gcgactccca cacgacacgg gcagcttcac aagccatctc tttcatttct
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gcttgaagcc cccttggctg cagcaatcct gtctggccat aggtttcttc cttccttacc
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tacttcaagg ggctttttct aagggcatgg cacacatatc ttcctgtttc tctggaggag
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taccatgggg ttccttaaaa gaagaaaatt tctaattctg aactcaatgt tttgctttta
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ctccctttct actgacaaat catgataagg gcacaaaagc tgtacagatt ttttttttta
                                                                   2460
accactcaat cccaaatgga ggcctacaaa gaacatcgta ataacacatg gaagcaaacc
                                                                   2520
ctgggttttt aagagccaaa ttctgtcccc cccctccact ccccccaagt gacaagatac
                                                                   2580
taatgaagaa agttcttcac catagtgttt gttttaacta aactcattgg agtctagttc
                                                                   2640
caaatttggg tagggtcatc atctctacat tccttaggat ttctctccct atcaagctgg
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cccagataca agtaccaaac agtagtctct gaagttcccc catttccttc agtaccagtc
                                                                   2760
tataagctac tgtccgccac tgattttcat ctatcagggt gtcctaatca gaatcagcca
                                                                   2820
eccaageaag ectetetgge ceacatatet atetettgee tteecceatg aactteagee
                                                                   2880
tgtccacaca aaagccacat aaactcaagc aagaaatatg ttcagccaaa acatgattat
                                                                   2940
agtggcaget gaccaateee ceateceaaa ttgaceattt agatgtacea aeteacetta
                                                                   3000
aattagcatg ttccaatcca gtcggcattg cctgaataca gtagcatcat acctatagtt
                                                                   3060
ggtcttagat aagaaatgaa ctacttgata tagcaaagtc ctttggcttc qtaaataacc
                                                                   3120
```

```
ctgaggtttt gtacttactt tccccatagg aagacagacc ataggcaaac tctgttttgg
                                                                3180
gatctcaact ccatcacctt tgtttcaata tttttttct ctcttgaaca aaactgagat
                                                                3240
aatttagaaa acaggtgctt aattgcaata aaattactat gaagtatatt aaaaatcacg
                                                                3300
acattgtaaa atctcacttt agatcatcaa agaaaaccat tgttactatc tcctttgagc
                                                                3360
ttaggaaaat gtacaagaga acaaattaaa attgaaaaat tgatttcact tagaaaaact
                                                                3420
tctaggaaca gggtgaacca ctgattttaa tttgcctaat tatcttatga caagtatcaa
                                                                3480
attaagatga cacttaaaga toottagcat taacttaatg atggagaaga gtgotcaaca
                                                                3540
gacagttccc agtaaggtaa tgagatgcca ttttcagaga cattctaaga agatattttg
                                                                3600
attcattaaa acattaaata aaaagccctc ctcagattgg aacccccaaa tcgatggagc
                                                                3660
3720
tctttaatac tttccatgag tactaaagat tgtaatgagt taccttatcc ttagaagtag
                                                                3780
aatgtttgct ttcttcttct tggaaatggt cctccaaaaa gtccacttgt accagtgaca
                                                                3840
agaagtcact tgtatagtga ccaagtacac ataaaatact gattataaaa atattgtaat
                                                                3900
aaaccacttc ctcatttgat acg
                                                                3923
```

<400> 3694 ttttttttt ttaagatttg attttctttt atttgtcggc actaaaagac agatagctgt 60 gatgaagagc aattggctgg tagctcgtgc ctcaccaaga gtttagcaac gttaatcagt 120 gaatgcagaa cagcttccat tctacctgag gcctagatct gagatcgctg tgaaacatta 180 aagtgaccct caccatactt gttttcccac tcagatacac attttatttc atcaacacat 240 ccttgatttc ctattacttt ttttccaata taacaaaatg ttttagacga tatatatgaa 300 aaaactaact gctgtaggtt aggacctcat tataaaatat tggtgactgg gcaccatcgt 360 tgacgaacga ccacgatatc ctnaccaaag ggagccaatg agctgttggg acaaacgcqt 420 caagggctga accaaaattg tgacgctctc agcgcaactt tgatctggaa ctcttgacag 480 gtgggcatcc aacatccctg ctccttgacc ctctgcagga ttccaggaag ggctcccagt 540 gaaggtcatc agggctccgt acacagggca ccgtgggggg nagggcctat ggtcacttca 600 tagcctgggg aatggctgtc catgtggggc actgcccatc cactccagtg gtggtgtgac 660 ctcagccacc cgccaccctt gcaggactcg ggcatgccct ggccacatga tcacgtagga 720 ctgttttctg ggtggtaata gttgattttt aaaagcttag ttggtcagat catggactgt 780 gaccctctgt gaagtgttag ccccaaatat ttgaggaaga agaatccagc agttttacta 840 cctaacaaag ccacctttga aaagcctccc aattttttt cttactacca aaacacacag 900 catcatggag catatcacat tcagattgtt ccatctgatt catatgtttt ttctaaaatt 960 caaaagatct taaatcagta agtagtttca tccatctgta tgtggtaaaa gtctcaaagg 1020 tcccnaaaat cagtcctaag gcatgattcc tttttacttt gcccccataa atataattaa 1080

gtgtgaagtg ctgggctccc agcatttaat agtccccatt aacctgccca acaagaatcg 1140 tttaattagc aacttaagat attccagagg ccaaaacaca tttccttggg gcacacgagg 1200 ctgcggcagc gacacagcat cttctccttt cctttcaagc cgttatacag gaacacaccg 1260 aaaatcaact gtgcgcattt tggcctgtag acaagaaagt aacaccaaaa cttgatgttc 1320 ctggctatgc agactccttg agtgacgcct gtgggcatat tacaggtggg tttctgcaat 1380 tctctggcct ctgttcattc acacgagcaa gggcaccttt ctcagtctcg cagccctgt 1440 gccggagcgg atggcgtcca tcaaggcttg ccttgcgtct gcggtgttgc tgagggtgcc 1500 cgtgctgaac ctggaggccg tccttggtgc agagagacc tgggagggtg gaggggtgg 1560 tgggggaatg gctggtgggg acagaagacc aaggtcttct agcagaggac tttccgagcc 1620 ctgtgcagag agtgcggcat ctcggaagct ctggagctcc tcagaagcag aggatgccac 1680 cttcctcagg ctgcaggtgc cgctgtgccc gcggatagct gccagcagtg cagatcgttc 1740 gccctctgcc tccgtgtagg acagtttcgc tggcctgccc tccccggtgt gttctgccgt 1800 cttgcgtagt ctgtccttcc ctcccgcaga gtggatggct tccatcaggg cagagtgcag 1860 ggatgtgtct tttgggactg gtctctggac aacaggtttg aattttttct tcggcccaaa 1920 aatgctgggt ggccaaatac tgtctgtttc atttccatct gtagagaaca cactgggctt 1980 ttcctctctt tctaggagaa tgtggctttc tgtgccagac cctcctggag ggtgggaagg 2040 ctcgccgtgg cctggggcgc gcacagagcc attgaccagc tccctgctgc aggcctgagt 2100 gtcagatgtg tgtggagggg gtgggtctgt accatcaggt gcgcgtctgg gctcagatgc 2160 tgagctggcc tcctggctac ttgtgctttg ctttccactg aaaccacagc tctgtcccac 2220 agaaacacga tccctctggg aagactgaac cagtgagaaa caggagcttc tgtggatagc 2280 agcaggtctg teetgagtag acaaetteet gtgtgggeea atgaeeteee eectaggagg 2340 ggctccccct gccaaatctt ccccgtggtt gttgggagga gtgacacagg gccactgggc 2400 accatectte catecttgtg tetetgagtg tgggetggat gteetgteat ettteacagt 2460 gacaggtggt gcagccagca ctggcgcctt gcctgcataa cccttctcgg cataaccqtq 2520 tggcctcacc acatcagcat ggacttttgg ggctcctatg cgcttggcaa tggcagaggc 2580 cacatactgg ctggacgttc ttctctgagg cttgagaaat gtgacttctg tggtgtgagc 2640 tgctggcacc ctcacgtgac ccatgcccat ggtgggggc tggtttctcc cctcccctag 2700 ggggttccgg ccctcatggt gggcagactt ctgctggggc gatattggct tqqqqtctqc 2760 ttggagtctg ctctctggat tctgcgtctg cgtgggcaca ggggtggagg ggggtcccct 2820 ggcagagctc tctgagggtc ggcccaggtg tttttccaca gagttgcacc tccagaactc 2880 tetgaettte ecaatggget gagattetge tteaggeaca gacgaagaca gggaaatgat 2940 cctgatgccg gtggcgtgag gactcaccaa gttccccagc tcgtcaatct taatggctcc 3000 ggtggagagg gacacatctc tgtcgtaaca tcgcatctct gactttggag gaatgatttt 3060 atacgttgtg aggccgtgct taagtctgta gcttttccct gggttttggc ctcgttggtg 3120 ccatgatgtt ggtgccaagg cagcgttttt atcgttgctg tccttttcat tcaccggttg 3180 ggaattcact ctctctgtgg cttgagtcct ctccccgtca gcacagccat acactttgtc 3240 tttcactttt gcatttaggt tgtctgtgtg aagattcaac gcaaaattat gtttctcctg 3300 ggcgccgttt ccattagatt cccatcttta gagatgttag ataaggccac acqqattcct 3360 tttccgatgt catgggaagc ggggtgcagg gcaggtactt cctcccttgc cttttcatgg 3420 ggctggctgt gctcagcttg aagtggcgcc agggaggctc tcctgctggc aacaccctcc 3480 gagtcgaaag acccagcatt gttgtttcta ttggaaaaca accccgaatc cacaggatca 3540 tctgaaactt cccctatgaa tgttactggg attgcatctg tgtcgccgtg agggatcatg 3600 gcatcctgtg ggcagtggtt ggatgcacca tggatggagc tggtgaggga gctggtgtct 3660 gtttcatagc tgtcttccat ttcttccagg tcttcatcaa gttctgcaag ggttttacgg 3720 aactctccag caattaatag gtcttcttca tcatttgagg ctgtgacagc tttttcagtt 3780 ctcagatgtg agttctcaga gccattcttc tcccacaagg ggctcttctg gggacccagg 3840 tetggggtte cagegaggte etggteactg cagtetteet ggtetgtgge ceaettgtet 3900 ttgtatttca tgctgtcctg ctgcgagtcc agagagacga tgtctgaggg ggaactcatc 3960 actcctgagt cctcggtcgt gtcctccgac gcaaaacagc tgccaactga cacggtctcc 4020 tecgeetetg acageaectg eggggeteea teegggetge agtggetgee agaeeceagg 4080 ggcaggetta ccategtget ettectgtte tecteettat eeteagtgeg gttggggate 4140 aggggactcg gtggtggtgg ctgtggtgga gggggagctg gcgctcgccg cttcttcttc 4200 tgtaaatcaa tctgtgaccc aagagatacc ttttccgatg ccttgtcttg cacaggtggc 4260 cctgaacctg gaggaggagg ggctcggcgc ttcttcatct ccgacttcac ggacacccct 4320 gagatgctgc ccagcgagag ggatggaccc agcgtaagag aacgtgagtg catggatggg 4380 gagttggggg tcgttaaaca gcccttacta ttgcttcttt tattaacttt gaaaaatccc 4440 agaaattttt tottotottt atotgtotoa toattgocaa gtgatgattt ootaaaggtt 4500

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                                                                     4620
tcacactttg cacaaatgac tgggagaata ttctggagag gaacctcagg gctcacatgc
                                                                     4680
acaacagctt tttgtgtccg caggtaattc acgaccaaac gcacagattt ctcaggcacc
                                                                     4740
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                                                                     4860
gaccgaattt caagggcatg gtgggatgga ttcaggtggt tctgaaggca aagttcaacc
                                                                     4920
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aggaccacgg tgacgtccat ggtgctggcc ctcagcgcct ccttcatgcg aaccaagttc
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gccgccgagg cgcgcggcgc gtccatggtg ccgggggccg ggacgcgggc ggtgctccgg
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gcccgccgag tcaggcgctg gctaccgccg ccaccgctgc cgccctcatt cactttttcc
                                                                     5280
gcgctgaccc atcgtcctcc cacgcgggcc ggcggaggac agcggcggag cgcggcggac
                                                                     5340
ggaaggggt gg
                                                                     5352
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```
<210> 3695
     <211> 803
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (479)...(684)
     <223> similar to gi3002527 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3695
acgtacgtat gagcaaccgg cctttatttc ccgggacgac gatttcttct gagaaagaac
                                                                       60
gacaggttca gagacgccgc taggattaag tttaagactt cgcgagaaca gaatttcttt
                                                                      120
tggcacctcc tctccgcgcg ttcttggggt gaggctgggt aattgttcct gcagggtggt
                                                                      180
gggtgatagt ggccagttga ctgcgactgt gtttgggtgg tgggaagcct gaagaaaagg
                                                                      240
ttgtttctta ccggtcgctg cctcagggag gtagtgcggt agaattttcc gctatgggtc
                                                                      300
attctcggtg tccgcgggga agggcgtgac aacgacgggc gtgacggcga agcaacagtg
                                                                      360
tetegagage getgeegeee ggagggegee aggagaagtg egteegagae geegegegt
                                                                      420
gatgctcctg aaaacgtctg cccggcgtag cgggaaccca gcatgatttt caggagtctc
                                                                      480
tgttgcccag gctggaatgc aatggtgcgg tctcggtcac tgcaacctct gcctcccggg
                                                                      540
ttcaagcgat tatcctgctt cagcctcccg agtagctgga attgcgggca tgtgctacca
                                                                      600
cacctggcta atttttgtat ttttagtaaa gacggggttt ggccatgttg gccgggctgg
                                                                      660
tctcgaactc ctgacctgag gtgatctgtc cgcctcagcc tcccaaagtg ctaggattat
                                                                      720
aggettgage cacegegeee ggeetattte tgagtgttta ttgtaaaaac tatagttttt
                                                                      780
aaagtttgcc agatgcaata aaa
                                                                      803
```

<210> 3696

<211> 917

<212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(918)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (679)...(388)
     <223> similar to gi2879865 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3696
tttcgtccta aatttgtgca agaaatggca ggcttattct atctgaaggc ttcaaaaaaa
                                                                       60
gatacacaac atgtaaccag gttcaaatat tctgggagat ccccccaaaa aggaaataac
                                                                      120
caaaataacc aaaaaaatga agaaagtgcc taaaacatga tacagcattt tagagccctt
                                                                      180
tcagatacaa ggcagagaaa ggtgtaaagt agaaaatatc cggatcttca gtaatttcca
                                                                      240
aaatggtcca attcctcagt tggctgcagg gcagctggca gatccttgct gctgctcctg
                                                                      300
ggacagagcc actaagtctg ctcctcggga cacaagccct caggccctga gctgagtgca
                                                                      360
cctctccctt ccccttctct tttccttcgc tccatttccc actccacaaa ggtgtcaaag
                                                                      420
agacttggcc aggcctcatc ttcactgtag ttgctgaggt cagggccaat cacctgagtg
                                                                      480
aagttaagga acatgttcca agtgtcccgg gagatgccct tgatccccga ggggttctct
                                                                      540
gttaggaagt ttagccattg gtccaatacc ggaggattgt tctgggtaaa gactagtttc
                                                                      600
cacagggcaa tggctatttc ccgatgcagt gaccgctgcc cttcttcaga gtccagggcc
                                                                      660
aaactgaaat gtaaaccggt agagatcctt gaatttatcc tcttqtttqq cttctqttaa
                                                                      720
gagggctagg ggaaccttgc acagatttcc gttcaatgct gttttgcact tattgntttg
                                                                      780
caggccattc aaaaaattcc tttcctgcaa caggaaaggg aaaagggaca tttattcatt
                                                                      840
attaaattat atttttacag ggcattntac tngtggttta ggngcagggt tttcaggccg
                                                                      900
ntggtttgat ttggatt
                                                                      917
     <210> 3697
     <211> 2094
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1589)
    <223> similar to gi1469169 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3697
agacgcaaga tggcggctgt ggtgctggcg gcgacgcggc tagctgcggg gctcqqqttc
                                                                       60
ttggggctgt tcgcggctga ggtttggacc tcctgcgtat agacggttta gtagtggtgg
                                                                      120
tgcctatccc aacatccccc tctcttctcc cttacctgga gtacccaagc ctgtttttgc
                                                                      180
tacagttgat ggacaggaaa agtttgaaac caaagtaacc acattggata atgggcttcg
                                                                      240
```

```
cgtggcatct cagaataagt ttggacagtt ttgtacagta ggaattctta tcaattcagg
                                                                      300
atcgagatat gaagcgaaat accttagtgg aattgctcac tttttggaaa aattggcatt
                                                                      360
ttcgtctact gctcgatttg acagcaaaga tgaaattctg cttacgttgg aaaagcatgg
                                                                      420
gggtatctgt gactgccaga catcaagaga caccaccatg tatgctgtgt ctgctgatag
                                                                      480
caaaggcttg gacacggtgg ttgccttact ggctgatgtq qttctqcaqc cccqqctaac
                                                                      540
agatgaagaa gtcgagatga cgcggatggc ggtccagttt qaqctqqaqq acctqaacct
                                                                      600
gcggcctgac ccagagccac ttctcaccga gatgattcat gaagcggctt acagggagaa
                                                                      660
cacagttggc ctccaccgtt tctgccccac agaaaacgta gcaaagatca atcgagaggt
                                                                      720
gctgcattcc tacctgagga actactacac tcccgaccgc atggtgctgg ccggcgtggg
                                                                      780
cgtggagcac gagcatctgg tggactgtgc ccggaagtac ctcctggggg tccagccggc
                                                                      840
ctgggggagc gcagaggccg tggatattga cagatctgtg gcccagtaca ctggggggat
                                                                      900
tgccaagcta gaaagagaca tgtccaatgt cagcctgggc ccgaccccca tccccgagct
                                                                      960
cacgcacatc atggttggac tggagagctg ctccttcctq qaqqaqqact tcatccctt
                                                                     1020
tgcagtgttg aacatgatga tgggcggagg tggctccttc tcggctggtg ggcccggcaa
                                                                     1080
gggcatgttc tccaggctct acctcaacgt gctcaacagg caccactgga tgtataacgc
                                                                     1140
gacctcctac caccacagct acgaggacac tggcctcctt tgcatccatg ccagcgccga
                                                                     1200
cccaagacag gttcgagaaa tggtagaaat catcacaaag gagtttattt taatgggcgg
                                                                     1260
aaccgtggac acggtggagc tggaacgagc caagacgcag ctgacatcaa tgctcatgat
                                                                     1320
gaacctggaa tccaggcctg tgatcttcga ggatgtgggg aggcaggtgc tggccactcg
                                                                     1380
ctccagaaag ctgccgcacg agctgtgcac gctcatccgc aacgtgaagc cggaagatgt
                                                                     1440
gaagagagte gettetaaga tgeteegagg gaageeggea gtggeegeee tgggtgaeet
                                                                     1500
gactgacctg cccacgtatg agcacatcca gaccgccctg tcgagtaagg acgggcgcct
                                                                     1560
gcccaggacg taccggctct tccggtagaa ccgctccccg gcctgacaga cccagggagc
                                                                     1620
tgcagctgga gcccgttccc gtgcgtgtta gtttggacac gaatttagtc taaaaagctg
                                                                     1680
tctggttgta taaacggtgc aaacaatgtc gccacagcac ccacgcggtt tgcattcttt
                                                                     1740
tggaactcaa tgtgccgatc agtggagtca gtatcgagcc tgaccaccgc aagccaggaa
                                                                     1800
gcaggtgaag tgcccagcgc tggagtgcag cgtgccacga ggagggcggt cggtgcttcc
                                                                     1860
ctcctcgggc tgtgggcaca tggggccccg caggttcctt ggaggagccc tgagctggga
                                                                     1920
ggcagcaaag gctgacctat caaagcctcc cggaggccac cgtgctgggt accaggactc
                                                                     1980
acetetgaea ageaggagaa ggtaagggee eggteagete caaggagege geteeaegeg
                                                                     2040
cgtgcacaca gcttccctgg taataaagag ctggcatctt tcttaaaaaa aaaa
                                                                     2094
     <210> 3698
     <211> 2054
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1623)...(571)
    <223> similar to gi2443338 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 3698
ttttttttt ttgagtggca acttcacgac ttttatttgt ggtgcctgtg ctttatctcg
                                                                       60
aaaatacett eteeceetge eecagacagt gggeggggag ggggcagcaa aaaatagaag
                                                                      120
```

180

240

300

360

acgtccctcc ctattgcaca tggaccctat atacaggccc acctggctga ggctggcggg

cgtgagatgg ggacctccag gcggccactc tggtcctggc tactgatcct tgcacttctt

ggtcctcagt teetteetgg teeegtetet ggeeetggte eestetggea acgteeceet

```
gettggeteg geeteecace tecateetgg eetegggtgg eeeeetegge teetggggae
                                                                      420
tctgctcccc tcccagtccg gaggtcccag gggggctatg gcttctctga gacttccccc
                                                                      480
ggagccctgt cactcgtgtt cacacggggg aaggggtgcg tgtggcagaa gcagctgtat
                                                                      540
aaatacgggt gcgggaaagt ccctccgggt cacttggaga gtttgctgat gacgcggatc
                                                                      600
aacgctgcat tctcatcctt gaggcgctgg ttgtcagcgc ggaggtcaga cagggccttc
                                                                      660
agetectect ccagetetge ggeettgegt tecagggeee tgegetegaa tetetecagt
                                                                      720
tccaggaggg ctggcctctc agcgaagcgt tcttgcctct gcgtggcccg ctccagctcc
                                                                      780
accttgaget gegecageeg cagegtggte teggteaggg cetegegaag cegetegtte
                                                                      840
tccctgcgca gctctgcata cagcgtccta aagcctccgt ctggctcttc cgattctggc
                                                                      900
tcaggttctg ggttgaggtc ccgctgccac cgctgcctgc gggccgaggg gccgcctcc
                                                                      960
agggtgctgg actcctggct gcggtcagcc ggctccgcct cctccccctc cgcaggcccc
                                                                     1020
ctccactcct ttccgacctt gcggtgctcc ctggccgcct gcggtcccgg accctgcccg
                                                                     1080
tegggegeet etgetetetg ggeagggetg teagagttet ceaeteeagg gaegegggge
                                                                     1140
cttcgggaag ggtccaggct ctgcgccggc ttctctgact ctggggcctt ccctgcagcc
                                                                     1200
ttctctgcct ccttcaggtc tgtaagagtc acaccctgtg tggacctccg agactggcgc
                                                                     1260
atgagacggg agcgagcttt tctctgggat tccgactcct catcccgcac aggcatctgg
                                                                     1320
taggacctcc gtcggtcccg ggagtccgct gggggcgccg tggaggctgt ggggacgttt
                                                                     1380
ggcttcgctg gggattcagg ctccggaatc ctggagggag gcgaggagtt ctccaagcaa
                                                                     1440
ggaggagget tggtgacete agacaggaca gagggeteeg geagettegg ggaggggte
                                                                     1500
ggggtaattc tggcaagacg gagctccttg gcctgagtgg aggtcccttc cagccaggag
                                                                     1560
gaggaageeg agegetgeag eecageeeea ggggeteeet eegetgteeg eettteaggg
                                                                     1620
ggacccaggg caccagaact ccctgtcttc aggaggccaa agcgcctgga gaagggggcc
                                                                     1680
tcttcaagca cgggactctt agggctgggg tgcggcgggg aggagacgcc attgagggtt
                                                                     1740
ctgggttctg cagggggtgg ttcggtggga ccttcttccc cctcatcctc gtcctggatg
                                                                     1800
gggggccccc cagccccacc aggccggcgc tccttggaca agtcctggag ggaaatcttc
                                                                     1860
tegegaetge teagaegaea eacagagete ettetgtgte tgetgetaga gggegettgg
                                                                     1920
ggctcctggc cccggctctg gcaagtttct ttttggttcc gaaggtcctc gtgtttccgg
                                                                     1980
gccagttcct ccaacaggct cagtacttcc ggacgcgtgt gtcgacgcgt gaattccqqc
                                                                     2040
ccgatactca gaag
                                                                     2054
    <210> 3699
     <211> 1202
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1203)
    <223> n = a,t,c or q
    <220>
    <221> misc feature
    <222> (53)...(825)
    <223> similar to gi5326919 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

```
<400> 3699
ccggtagaag cccgcaattc ttgtgtagac ccacgcgtcc gcggacgcgt gggtggaaga 60
gcaggcccag gagctgccc cagggactgt gctcacccgg aactgcaccc gctgtgtctg 120
ccacggtgga gccttcagct gctccctcgt tgactgtcag gagtgcccc tggggaaacg 180
```

```
tggcagcagg tggccccggg ggagctgggg ctctgcgagc agacgtgcct ggagatgaac
                                                                      240
gccacaaaga cccagagtaa ctgcagttca gctcgagcct cgggctgcgt gtgccagccc
                                                                      300
gggcacttcc gcagccaggc aggcccctgc gtccccgaag accactgcga gtgctggcac
                                                                      360
cttgggcgtc cccacctgcc tggatctgaa tggcaggagg cctgtgagag ctgcctctqc
                                                                      420
ctcagtggga ggcctgtctg cacccagcac tgctcccac tcacctgtgc tcagggcqag
                                                                      480
gagatggtgc tggagccagg gagctgctgt ccctcttgcc gcagggaggc tccqqaqqaq
                                                                      540
cagtcgccct cctgccagct cctcacggag cttcgaaact tcaccaaagg gacctgttac
                                                                      600
ctggaccagg tagaagtgag ctactgcagt gggtactgcc catccagcac ccatgtcatg
                                                                      660
ccagaggagc catacctgca gagccagtgt gactgctgca gctaccgtct agacccggag
                                                                      720
agccctgtgc ggatcctgaa cctgcgctgt ctgggtggcc acacagagcc cgtggtgctg
                                                                      780
ccggtcatcc acagctgcca gtgcagctcc tgccagggtg ggtctgggca gggaggggac
                                                                      840
ggggcaggag cctgggcaag gacccagtgt tgtgaaccag acccaggaac acacgtgtag
                                                                      900
ctcctcactc catccttctt ccttgagtcc ttccagtcca cgtttttcct tcttctcqgt
                                                                      960
gttcttgtta atttcatctc ctatcatgca tacttgtggg tgtctggggt agttgcacct
                                                                    1020
agttcaaacc ccagctcatc tgtttccttt gtttccttgc tcagcctccc tgacatcatc
                                                                    1080
nnnnnnnnn nnnnnnnnn nnnnnnnnnc caattgggac ccccagttgg gaggccaggg
                                                                    1140
ggaaaatttg ggttaattgg accccggaac cttcggggtt taggggaacc ctcccccc
                                                                    1200
ct
                                                                    1202
```

```
<210> 3700
     <211> 1738
     <212> DNA
     <213> Homo sapiens
     <220>
    <221> misc feature
    <222> (1)...(1502)
     <223> similar to gi2546979 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters.
     <400> 3700
atggtaacgt ggctttacag atttttaccc acttcaaata tggccgccaa gctccgttct
                                                                       60
cttttaccgc ctgatctacg gctacaattc tggcttcatg cccgcctcca aaagtgcttc
                                                                      120
ctctcgaggg gttgtggttc ttactgcgca ggcgcaaaag caagtcctct tccgggcaaa
                                                                      180
atggcgatgg gactaatgtg cggacgccgg gagcttctgc gcttgctaca gtccgggcqt
                                                                      240
cgggtccaca gcgtcgcagg gccctcgcaa tggcttggga aaccgctgac cacacggctc
                                                                      300
ctattcccag cagccccgtg ctgctgtcgc ccacactacc tcttccttgc ggcttccggc
                                                                      360
ccccgcagcc tcagtacctc tgctatctct tttgcagaag tccaggttca ggcccctcct
                                                                      420
gttgttgctg caactccctc acccacagca gtacctgagg tggcttctgg agagactgca
                                                                      480
gatgtagtcc aaactgctgc agagcagagc ttcgctgaac tggggctggg gtcatacacc
                                                                      540
ccagtgggac tgatccagaa tttactggaa tttatgcatg ttgatctggg cctaccttgg
                                                                      600
```

tqqqqqqcca ttqctqcatq tacaqtcttt gcccqctqcc tgatttttcc tctcatcqtq

acgggccagc gagaggcagc caggatccac aatcacttgc cagagatcca gaagttttcc

agtcgaatca gagaggccaa gttagcagga gaccatattg agtattacaa ggcttcctcg

gagatggcac tttaccagaa aaaacatggt attaaactct ataaacctct cattctccct

gtgactcagg ccccaatctt catctccttc ttcattgctt tgagagagat ggccaacctt

cctgtgccca gcctgcagac aggtggcctc tggtggttcc aggatctcac ggtatccgat

cccatctaca tattaccact ggcagtcact gctacaatgt gggctgttct tgagctaggt

gctgagacag gtgtgcaaag ttctgacctt cagtggatga gaaatgtcat cagaatgatg

eccetgataa cettgeecat aaccatgeat tteeceaegg eagtgtttat gtaetggete

660

720

780

840

900

960

1020

1080

1140

<210> 3701

```
tectecaatt tgtttteeet ggteeaagta teetgtetee ggatteeage agtacqeaet
                                                                     1200
gtacttaaaa tcccccagcg tgttgtacat gacctggaca aattaccttc ccacggggaa
                                                                     1260
gggctttcct agagagcttc aaaaaaggct ggaaaaatgc tqaaatqacq cqtcaqctqc
                                                                     1320
gagagcgtga acaacgcatg cggaatcagt tggagctagc agccaggggt cctttacgac
                                                                     1380
agacctttac ccacaacct ctcctacaac ctggaaagga taaccctccc aatatcccta
                                                                     1440
gcagccagca gcagcagcag caaaccaaag tcaaagtatc cctggcacga cacacttggc
                                                                     1500
tgacttatgt tctgtgcgca ttctggcagg aattctgtct cttcagagac tcatcctcaa
                                                                     1560
aacaagactt gacactgtgt ccttgcccca gtcctaggaa ctgtggcaca cagagatgtt
                                                                     1620
cattttaaaa acggatttca tqaaacactc ttqtacttat gtttataaqa qaqcactqqq
                                                                     1680
tagccaagtg atcttcccat tcacagagtt agtaaacctc tgtactacaa aaaaaaaa
                                                                     1738
```

```
<211> 3561

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3205)

<223> similar to gi3676530 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3701
atggatgctg cgggaagggg ctgccatttg ctgcccctgc cagcggcgcg cggacctgcc
                                                                       60
cgcgctcctg cagccgccgc cgccgccgcc gccagcccgc ccggcccctg cagcggcgcc
                                                                      120
geetgegete ceteegegge egeeggageg ggegeeatga acceeagete eteggeggga
                                                                      180
gaggagaaag gggcgacggg cggcagcagc agcagcggaa gcggcgccqg gaqctqctqc
                                                                      240
ctgggcgccg agggcggcgc ggacccgcgg ggcgcagggt cagccgcggc ggcgggggcc
                                                                      300
gctgccctgg acgagcccgc ggccgccggc cagaaggaga aggacgaagc qctggaggag
                                                                      360
aagctgagga acttaacttt ccggaagcag gtctcgtaca ggaaagcaat ctcccgggca
                                                                      420
ggcctccage atctggctcc tgcacatece etcageette etgtggcaaa tggtccagee
                                                                      480
aaggagccca gagcgacttt ggactggagt gagaatgccg tgaatggaga acacctgtgg
                                                                      540
ctggagacca acgtctcggg gagacctctg ctaccttgga gaggagaact gccaagtcag
                                                                      600
atttgcaaaa tcagctctca ggaggaagtg tgcagtctgt aaaattgtag ttccacaacc
                                                                      660
gcctgcattg aggagctaga aaagattaat ttcagatgta aaccaacatt tcgagaaggg
                                                                      720
aggctcaagg gtcaacaaga gaaaattttg tacgtcatca ctgggtgcac aggcgtcggc
                                                                      780
aggaggggaa atgtaagcag tgtggtaagg gcttccagca aaagttctcc ttccacagta
                                                                      840
aagagattgt ggctatcagc tgttcctggt gcaagcaggc gtttcacaat aaggtgacct
                                                                      900
gcttcatgct gcatcacatt gaagaaccct gctccctggg ggctcatgct gctgttattg
                                                                      960
tcccgcccac ttggatcatt aaggtgaaga aacctcagaa ctccctgaag gcttcaaatc
                                                                     1020
ggaagaagaa qagaacaagc tttaaaaagaa aagccagtaa aagagggatg gaacaggaaa
                                                                     1080
acaaaggteg teettttgtg ataaaaceea tetettetee teteatgaaa eeettgettg
                                                                     1140
tatttgtgaa tcccaagagt ggaggcaacc agggaaccaa agtcctgcag atgttcatgt
                                                                     1200
ggtacctgaa tccacggcaa gtctttgatc tttctcagga agggccaaaa gatgcgcttg
                                                                     1260
aattgtatag gaaagtacca aatctgcgaa ttctggcctg tggtggggat ggaacggtgg
                                                                     1320
gctggatcct ttccatcctg gatgaactgc agctgagccc tcagcctcct gtgggggtcc
                                                                     1380
ttcctctggg gactgggaat gacctggctc gaactctcaa ctggggaggg ggctacactg
                                                                     1440
atgaacctgt ttctaagatc ctgtgtcaag tggaagatgg gacagttgta cagctagatc
                                                                     1500
gctggaacct ccatgtggaa agaaaccccg acttgcctcc agaagaactt gaagatggcg
                                                                     1560
tatgtaagct ccctctgaat gttttcaata actacttcag ccttggattt gatgcccatg
                                                                     1620
```

```
tcacactgga gttccatgaa tccagagaag caaatccaga gaaattcaac agtcgttttc
                                                                     1680
gaaataaaat gttctatgca ggggcagctt tttctgactt cctacagaga agttctagag
                                                                     1740
atctatccaa acatgttaaa gttgtttgtg atggaacaga tctcacccca aagattcagg
                                                                     1800
aactgaagtt ccagtgtata gtattttaa atatacccag atattgtgct ggcacaatgc
                                                                     1860
cctggggaaa cccaggtgat caccatgatt tcgaacctca gcgtcatgat gatggttata
                                                                     1920
ttgaagtcat tggatttacc atggcctctt tggcagccct gcaagttggg ggccatggag
                                                                     1980
agaggctaca ccagtgtcga gaagtcatgc ttctaactta caaatccatc cccatgcaag
                                                                     2040
tggatgggga gccctgtagg ttggccccag ctatgattcg gatctccctg aggaatcagg
                                                                     2100
ccaacatggt acagaagagc aagaggagaa catccatgcc tttactcaat gatccccagt
                                                                     2160
ctgtcccaga tcgtctgagg atccgggtga acaaaatcag tttacaagac tatgaaggat
                                                                     2220
tccactatga caaggagaaa ctccgagaag cttctatttc agactggtta agaaccattg
                                                                    2280
ctggggaact agtgcagtca tttggagcga tacctctggg tattctagtt gtgcgtggag
                                                                     2340
actgtgattt ggagacttgc cgtatgtaca tagaccgcct acaggaggac ctacagtcag
                                                                     2400
tttcttctgg ctcccagaga gttcattacc aggaccatga aacctccttc cccagggctc
                                                                     2460
tctcagcaca gaggctctct cctcggtggt gcttcctaga tgacagatct caggaacatt
                                                                     2520
tgcactttgt gatggagatt tcccaagatg agatttttat tctggaccca gatatggtgg
                                                                     2580
tgtcacagec ggeggggaca ecteegggea tgeetgaeet ggtggtggaa caageetegg
                                                                     2640
ggatctcaga ctggtggaat cctgccctgc ggaaacgcat gctgagtgac agtgggctgg
                                                                     2700
ggatgatagc tccctattat gaggactcag atctgaaaga tctcagccac tcccgcgtgc
                                                                     2760
tacagtcacc agtctcttca gaggatcatg caattttgca ggcagtaata gctggtgatc
                                                                     2820
ttatgaagct aatagaaagc tataaaaatg gaggcagtct gctaattcag ggaccagacc
                                                                     2880
actgttcact ccttcactac gcagctgaaa ccggcaacgg ggagattgtg aaatatatcc
                                                                     2940
ttgaccacgg accttccgag ttattggata tggcagacag tgaaacgggt gagactgcac
                                                                     3000
tgcacaaggc tgcctgccag cggaaccggg ctgtgtgcca gcttctggtg gatgcaggag
                                                                     3060
catctctgag gaaagacgga ctccaagggt aagacacctc aagaaagagc acagcaggcc
                                                                     3120
tggggaccca gacttggctg cgttaccata gaaagccgtc agaactataa ggtcattggc
                                                                     3180
catgaggacc tggaaactgc tgtttgaccc tggtattcgg gcaaaagagg acatgagcaa
                                                                     3240
gegtateaca tetgecetee etgeaattgg geageteeee tggaagaage tgatggaatt
                                                                     3300
catatatctg tctctctct gcaagattct acctgagacc atgccactag cttttaaggg
                                                                     3360
ctaccaagat gtacaacaga acatgatagc ccattgagaa ggaggcagga tacctggaga
                                                                     3420
tttgtggaat acagtacgag ttccacaaaa tttgatcctt attgcttcca gcaagtagca
                                                                     3480
tgaacttctg tgttcacctg tataatttat tttaaagatt caaaggatgt tcgtataaat
                                                                     3540
ggcactgctc catcctccaa a
                                                                     3561
```

```
<210> 3702
<211> 2580
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2581)...(1593)
<223> similar to gi5731802 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3702
gaataccatt aaacttcaaa gaatcttcgc ttgtgcttaa aaataatgct gtcaaattgc 60
ttcatacact ttataagact ttaggcaaga aacattacta atggtatcat aaataagtat 120
tataacttta ttaaaatgaa aagacaatat tcaaaataat gcaacaaaat gaataaaatc 180
ctttgtccaa tactgtacac ataatgcaga aatcagtgca tttttcttaa gcatgttta 240
```

```
accttcattt agttcatact aaaatataat aagctttaaa tagctcaaat aatattcagc
                                                                      300
agtttaaact gtaaacagct tgtttaactg ttaagagaac attgcagtaa tgtacctctg
                                                                      360
ttagtgagca ccttctcttc tgtgcttatc tcttcaagat aaatacatgg aaggatgtga
                                                                      420
aaatcggaac accaactatg tgtctcactg catctaagtg aagcagccac agctgtgaga
                                                                      480
gttttcaaag cagaaagatg ctgatgtgac ctctggaatt cagacatact gagctatggg
                                                                      540
tcagaagtgt tttacttaaa aagcaaacaa tccccaggaa atactgaata ggaaccagca
                                                                      600
acacaaggcc agcttgtgtt gtatgtttat taatacagtc taaaaaaaaa agcaaaacca
                                                                      660
caacacacat ccccaaacaa taactctcaa tcacatagct aattgcttca ttattttgta
                                                                      720
aaactgacat cctaacactg gcacctagaa tacttttcca tctgagtcta acgtacccca
                                                                      780
ctgcctctaa tacggcccgc actacgatga gctacttcag tgggtgggac caagcaggaa
                                                                      840
ctgtaaggga aaattagtca ctagttctat tatcgtttta tttttcaaga tgtgtgacag
                                                                      900
gtacaggtga caatatggtt gccaagtaac ctgctctccc tccctcaaca agacgcaaca
                                                                      960
tgaaacctgg aagtatgagg ccttggtatg atttttaacc taagcaggta cacccatggt
                                                                     1020
aaagaatgga taccctgccc tccatggaaa agattgcctg caaaaataaa tggaacaaaa
                                                                     1080
tagaaaaggc ctaaaagcca gaaatcttca aacttactaa acaaaaatat tttttaatga
                                                                     1140
ttctgatcta aacaatactg tatcttcttc catttgctca attttcagtc tatcaggact
                                                                     1200
catttctcca gcttgagttt attattctga atatatatta ctctacgata gtaactaatt
                                                                     1260
ggttaacctg cagctatggt ctatggttat accacaagtt tatatatagg tatgtaatgt
                                                                     1320
atgcatatat aaaaagcttc cccatcctcc cctccccacc atcacatctt taaattatag
                                                                     1380
acttgtaaga cttttttcca acactaacaa agtcagggtt tctcagcata acagcatctc
                                                                     1440
acaactgctc taaaccttcc acatgaagac agagagttca actattttat tttgcaatct
                                                                     1500
aagggatttt tctctgcact tcaatcaaac tggaaaattg agaaccattt gctcctatgt
                                                                     1560
aacctctgct gaaccatgac cccaaggtct aaggagtccc cacataggat aaatgtttac
                                                                     1620
getteaegtg gecacecaga tecattiting tittingagte toggettitet giggetgaag
                                                                     1680
atataccgca gtcagcaggt aatggctgga tttgggcgcc tccatttttt ttttttqctt
                                                                     1740
ccctaaaaaa tttttcatat ttgtccaggt atggtggtcg ttcaggtagt aggtaataat
                                                                     1800
gtgttgaact aaccttcttc ccattttcaa taatgggcag aatgcaagga accttactgg
                                                                     1860
cagatcette getgttetgt etttgeagtg etttgetget gacataettg ggatcagggg
                                                                     1920
caaagctctg tgtcgggggc atgaccccat tgaggtaaga cggaaggctt ttgggactcg
                                                                     1980
gtgtgcgcga gttactcggt gacaaaggtt ctcttggcgg tactttggga ggcctqtctt
                                                                     2040
catcactata ggtgctcgaa gtaacttctg ctgaccatct tctataatct ggctttactg
                                                                     2100
gtctaggagg tatgggaact ctggggggaa cctcaggttt gtcttcatcg gagttaggag
                                                                     2160
aagctctgtg tatacaacag ttggatatcc ttatggctgg cttgttaaag gagccagctg
                                                                     2220
gtcccgaatg agaccttctt aatcttcggt gggtctgagg tggaggagga tttggatctg
                                                                     2280
ggacacetee cattitiggie agacacatag etgagatetg etgeagaaae agetggggta
                                                                     2340
tcaaaatatg catagttgat ttgtccacac ccacggcaac ttcgcctgcc caggaacatc
                                                                     2400
atatttgaaa tcagaaagtg tagagtcttc taaaaggaag tctgtatctg agctagttag
                                                                     2460
gaattccacc tcacagtctg tgtcatccag agagagggct tcagagattg gcaacggtgg
                                                                     2520
aagaggccta gaaccccgtt cacaaagagg ggcacagggg aaaagggaag gggagttttt
                                                                     2580
```

```
<210> 3703
<211> 2903
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2904)...(1735)

<223> similar to gi5262591 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3703 ttttttttt ttagactcaa aactttaatc agagaaccaa caaatatgca cacacggagg 60 gegtttetae ettggeetge ageaacaeag gtgaetgatt tacagaetge ceccaeaece 120 aatggctgcc agttttccat agagtcccta ttgtgtcaca gccctgcaac actttgtaca 180 ctcttttggt atacaacatg cccatctccc cgacaagaca gagctccaga ggacgggaac 240 catgtgcgag aagttaaatg ttgcaaccat ttgaaaaaca gtgtaaggcc ccaatggtta 300 gccaacaggt tcccagtttc aactaagttt aacaaacttt aaccagcaga actccaggtg 360 ccagagttga aaagcccaag ggtgcagagc actcactccc tcaccatttt cagcacctaa 420 aatatgaaag gtattcaaag tatgtgtcca gtgctttttc ataagactac tgtgtttcag 480 caaaggtgtg gactgagcca cttagtggca gggaacaaac accccagagc tgacaagaca 540 cttggtaggg aacttggttg tgtggttcca tctcactgga ctctccaaca atccttggtg 600 atcccagaac ttcctgtgac atgagggaat gtggcatttt caagatgtca cttgtcaact 660 aacagcaatc gtcgatgaaa atgggttcat ttctgattcc agaagcttca gagcagtagt 720 gcatagtgta tggatactac ccgcccccga gcctagcaaa ttgcctggtg agcggccatc 780 ctggataaat ggtgaatgat gacatcccag tggtcacttc cacacaccac aggtttgacc 840 cctaagtatg tcttccatat gggttgtttc atatgcggtt aacaccctga tcaatgcagc 900 tttcctgatg gaatccagct gtgttttggt gtcaactccc atgaaaaatt gggtgtctta 960 ttgcataacc aacactgtta aatggaggaa ggtcatagga agagggagca tgtgtttgtg 1020 ggatagggag tcctctttaa gtgagaagct tgggaggtta ggagtggaag gttgtagcta 1080 gttgaggtga agagtttaca tgttcttttt ggctttctgg ggcttaagaa aaaacccagg 1140 agagataaag ggacaaaaaa ggccaggcac ttaagaagag taaagtgctg gagaaaaact 1200 gtaaaaaagg aaaacttaaa ttaaaagcga tacattgtaa gaacattaac tacagtaaac 1260 acagattact aatteettte ttgtaacaca agtatatttg tgetataget gatgtgtatt 1320 tgtggcttac acttggtgag ccctcatgtg ctggccatca gttctaagtg cttcacattt 1380 atttatttaa tootoagaaa agooototga ggtaggtgat goocatttta cagataagga 1440 caccgaggcc ctgagagatt tttctgacct tcccaaggtc acttaggtag tagatggcag 1500 aggtgggatt taactcaagg tagactggct ccagagccta cctctgaatc ctgacgttgt 1560 acagettete caettttgtg ttttcattgt tataatgaaa aacatgegea caaaetttet 1620 aatcaatctt tagatgcatt tatttggaga gaaactgtgc aagtgggaga gtttccaact 1680 ttcagcatcc gagtaacggt ctcatattct gggactctgc tgccacccaa tggctacagg 1740 cagtattgct gcttgttgtg tacacgctga tggcggctga ggctcgagtg gcaccgaaag 1800 getttetgge aaegttgaca etgataaagt gteteetggg tgtgaaetet eaggtgetgg 1860 ttgagatggg cacttaggac aaaagctttg ccacacaaca atacaggagt aaggcttctc 1920 ccctgtgtga attctctggg tgctgtgtta ggatttgctt tctggggcaa aaggttttcc 1980 cacatttcac cacatctgta ggggcttctc ccccagtgtg aactcttccg gtgaatagaa 2040 aggcatgage tetgggtgaa ggettteeeg catteetgae aaacataagg etttteteea 2100 gtgtgaatte tetggtggeg gacaagetea geaeteagge egaaggeett eeeqeagtaa 2160 tcacatacat agggcttctc acctgagtga attctctgat gcttagaaag gcatgagctc 2220 tgacggaacg ttttcccgca ttcgttacac accaacggct tctttctggc atgagttcgc 2280 tcatgctgaa caaggtagtt tctctgggtg aagactctgt cacacttact acatttaaag 2340 ggattetete cagegtgaat taaetgatgt tttgagaggt gtgeaetgtg getgaaggte 2400 tttccgcatt cgttacattt aaaagggtgc tcctttgtgt ggaaggactg aagtttgata 2460 agggaggcac tgctgatggc tttcccttgc tcaccccatt tatacagcct cactctagag 2520 tggattettt gatggtgaat gageegagta etttggeeaa aggettteee acaetggtea 2580 cattcaaagg gcttcactcc cctggtgtga atcctctcgt gctgagttag gtatttgctg 2640 cagetaaagg titteteaca titgitaeae tiaaageaet tetetitetg tietgggite 2700 tgatccaaga tetteccaet cacaaaaaat eettgttttt etetggegtg aacaeteteg 2760 tggcacttca gggttgagcc gcaaatgaag cgttctccgc actcctgaca ttcatatggg 2820 gttttgacag tgtgcatttt ctggtgttgc acaaggcgat tgttatcgct gaaagtctcc 2880 ttgcattcag cacagctata ggc 2903

<210> 3704

```
<211> 1738
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1739)...(1512)
<223> similar to gi1041038 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3704 gaaaggaggt tgggggggc aaaccttttt tttttttggt tccggggggt tttgggggtt 60 ttcttcggtt ttggtttttg gtttttttt tcaaaaaaa caggacgttt gggggggcaa 120 acttttttt tttttcccta acaagtaccc ttgatctgaa tgggcaccag catttgtgtc 180 agtattggtt tcatcattat tattattatt attattacta ttattatttc ccatagccca 240 gttcagggat gcaaaggtct ttaaaacttc tggacaatct ctggtacaat gaggtgtctq 300 ataactgata aatcctatga tgccagatag gtgtaaaatt ttttagaatt ggcgtaatcc 360 attatagtga cttctagctt ataaaattaa cagataccat gatttcattt tagtcatgtg 420 ctttgataac agaaaataat taattagcat ttaatgtagt taacatattg tggtaaaagc 480 accattagat ttgttttttt gttttttttt tttaatttcc ttcagttttt aaagggatac 540 aagtttaaca ataaaaaaca taaaaagcaa aaatagctcc cctttttctt gcaaggctgt 600 tttttacccc aataatttag agtcctgggg tgaaaggact agaaaatcaa aaatagaatt 660 ttcaacaatc tgtatcttac aaagatattt agctatccaa tgaaattgca ctttactcaa 720 ttcaaaattc gattgttttg attgattcct gtcagtttct gtcaaaacag accatcttcc 780 ccatttccat gtgaattttt gcgtcattgg tgaaattgtt gaaaaaatgt tgttgttgtt 840 tttttaaatg taagtgcagc atttcaaaac ttttaaaaaa ctgaacagta gtagtag 900 tttgccattt tcggaattgt tctgcaatgt gagtggattc attgtccttg cgggccatgt 960 tatatactta actgctgact gctgaaccaa aacaaactaa aggaacaaat aaaaaaggaa 1020 tataactgca ttttcttttt ccaatatgtt acagaaaaac attgcccttt gactgtcccg 1080 ttatatattg cagatctcag ctactacaaa agatttagtt ctccatgtgc ctcctcaatg 1140 ctcaaggagg atcacacctg tgtgggtaaa ttcatgaaat actgtgaaac agccaggctc 1200 cgtaaggaaa gtgtgttaca acaggaagtc agtgagcaag ggtagtcctc cgctagccac 1260 gtcacctaat gctcacgcta ccatggaaac acttcaaatg ttacaaagcc caaccatttc 1320 cagccccata tgagaaatta caacagtccc taaagtattt taaaaaaaaa aaaatcccaa 1380 aaggttatgg cctttgctgt ttgaccataa tgcttgctgt ttccatgtac aagttgattt 1440 gaatcggttt ttctcccctt ccgctgatag tgaagttgta actgcgctgg gttgaggttg 1500 cgtccatgtt acagagttga gaaggggtca ggtggtctgt ctggtggatg gtgggacgct 1560 gcaactttta teccaggtae caggattggt gaegtggggg aggetgeaet eeettetgtt 1620 gacqtggttt qaagctctgt gtccggcacg gcagaggcac aggccgggca atcgttgttg 1680 gccgtggccg tggcaacatt ggggttggaa aggatgggtt ttgcacctga cctggtga 1738

```
<210> 3705

<211> 1740

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1741)

<223> n = a,t,c or q
```

<220>

```
<220>
     <221> misc feature
     <222> (212)...(819)
     <223> similar to gi4107015 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3705
gggctgaaat ggaagagatg aatacatctg aggaagaaga gtctccgtgt ggggaggtga
                                                                       60
cgctgaaacg ggaccgttcc ttctcagagc atgacctggc ccagctccga agtgaggtgg
                                                                      120
cetetggeet geagteggee acceaecee caggagggae ggagecaeca eggeeeegag
                                                                      180
ctggcagtgc gcatgtgtgg aggcccggct cccgagacca gggtacctgt cccgcgagtg
                                                                      240
tetetgacce cagecaceee etacteagea accggggete etegggggae agaecegagg
                                                                      300
cctccatgac ccccgatgcc aaacacctgt ggctggagtt cagccacccc gtggagagcc
                                                                      360
tggcgctgac tgtggaagag gtgatggacg tgcgccgtgt gctggtgaag gccgagatgg
                                                                      420
aaaagttttt gcagaacaag gagctcttca gcagtctgaa gaaggggaag atttgctgct
                                                                      480
gctgccgggc caagttcccg ctgttctcgt ggccgcccag ctgtctcttc tgcaagagag
                                                                      540
ccgtctgcac ttcctgtagc ataaagatga agatgccttc taagaaattt ggacacatcc
                                                                      600
ctgtctacac actgggcttt gagagtcctc agagggtatc agctgccaaa accgcgccaa
                                                                      660
tccagagaag agacatcttt cagtctctgc aagggccaca gtggcagagc gtggaggagg
                                                                      720
cgttccccca catctactcc cacggctgtg tcctgaagga tgtctgcagt gagtgcacca
                                                                      780
gctttgtggc agacgtggtg cgttccagcc gcaagagcgt ggacgtcctc aacactacgc
                                                                      840
cacgacgcag tcgccagacc caatccctct acatccctaa caccaggact cttgacttca
                                                                      900
agtgacagcc ccaggtggcc aggcctccag gaggcaccag gcaggccctg tatcaggcta
                                                                      960
ggacgctctg agctgtgcat gtacatatat acatatatag atacatttat aatataca
                                                                     1020
cacagtctat atatttatat acactgtttc ctggccccag agctcatttg ggttcaggcg
                                                                     1080
cacttcaaaa ccctccctgg gggaggctgt ttcttctcag gattccttgc cagggaggaa
                                                                     1140
ggggagggaa cagggtgggt tttctcactg aagagagaaa gcagaaggtt ctagatcctg
                                                                     1200
gcacagactg cateceatgt teccatgete tteteegtee ecaggaatge gaacggcagt
                                                                     1260
ttcccttccc cagtggacgt ctaggtgggg acagggtatc ttggctccca gctggaccag
                                                                     1320
agtgccctgc ttgcctctgc tctccctttg tggggactca ggcagcagag gcatctggga
                                                                     1380
agtetetgag taggeagggt ceteetggga ggeaceeeca eetgtttgaa aggtetngee
                                                                     1440
aggcgtggtg gttcaggcct gtaattccag cactttggga ggccgaggag ggaggatcac
                                                                     1500
ctgaggtcag gagtttgaga ccagcctggc caacatgatg aaatgttgtc tctactgaaa
                                                                     1560
atgcaaaaat tagccaggta tagtggcagg aacctgtaat cccagctaca ggggaggctg
                                                                     1620
aggcaggaga atcgcttgaa cccgggaggt gtaggttgca gtgagccgag attgcaccac
                                                                     1680
tgcactccag cctgggcgac agagcgagac tctgtatcaa aaaaaaagt tgcgggggg
                                                                     1740
    <210> 3706
    <211> 3115
    <212> DNA
    <213> Homo sapiens
```

<221> misc_feature <222> (3110)...(557) <223> similar to gi6002714 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3706 ttttttttta cctaaaaaga aataaaatgt tttactcatt tacacaaata cacactga 60 agtccaccct gggagctggt aaaacaattt cagtctcaga cccgtctgtt ttccagggtc 120 ctccgagcct gggcttcctc aagagcgtgg cccaagggcc ccacagccca gatccgggca 180 geoceaecae etteaetgag gaggeteega ageteegtte eegetgetee ttacagaeag 240 gggaggcaga tatacacaaa cgcgcctcgg cccagcttgg ggctggcggg ggaggctgtg 300 tcttcaaacc tttgccccca gttgggtcag tagaaccacc agtgtcctcc ccttctacct 360 cccagctcca ctttggaggc tgaggaagcg agaggttttc taggcagatt tggagccctg 420 gagattgagt tcacagtgta tgttctgggg gcgctggtgc agtcagcggt ccagtctcca 480 gcctgcaggc gtgcacactg gggtggacga tgggtggccc cgcaggtgta cacatttggg 540 tggccccggc ccctataccc cagtgttctc tttgatccag tcccgaaaca gagggagcct 600 tgtgtacacg cctggcttgt tcctctgagc gcagccgtct ccccagctca ccacaccggc 660 ctggaagate egeceateeg ecteeaeget ggacaggggt eeeeeggaat eaeeetggea 720 ggagtccacg ccgccgctga ggaagcccac gcacatcatg cgcggcgtga tctgctgcqg 780 caggaggttc tcgcaggtgg tctggttgat gacgcggatc tcaccctttt gcaggatcag 840 cgcgccagtg cctccatact gggtgtgtcc ccagcccgtg acccagatgg ccttgccggc 900 agggaagaca tgggaggcgt ccggcaggca gatgggccgc accatggagc tgtactctgc 960 cggtttctcc agctccagca gcgcgatgtc atagtcgaag gtgaagtcat tgaagaaggg 1020 gtgggagatg atgcgcttga gcctgcgctc ctgcacccca ggggcgctgc gctggctctg 1080 gtcgtgcaag cccaggaagg ccgtccactg cgtggggtct gagtacctga atcctctgtc 1140 atcgatgtag cagtgtgcgg cagagaccag ccagttggga gagatgaggg aagcaccgca 1200 gatgtggccc tggcccagag catgcaggct tacctgccag ggccactcgc cctcatccgc 1260 atccgtgccc ccaacaacac gagcctgtct cgtgaatgac cgcagcccac agtcgcagtc 1320 cttctcatct gagccgtcgc tacagtcctc cttcccgtca cactcagggt tgcccttgct 1380 caagcagagc ccattgaggc agcggtaggt gtgtttggta caagtgacga cgttcacctt 1440 ggggcaggag gcctcgtcgg acccgtcccc acagtcgtcc ttcccattgc actgctggct 1500 tttcgagagg cacttcccat tggaacacct gaaggtctgg gtccggacaa ctgcaccct 1560 gctcgtcgct gttgtctccg cagtcgttca aactgtcgca gacccagaag aggggcttgc 1620 agaacttgtt cttgcacgtg aactggtggc cggcgtcgca actgcagttg agctcatcgc 1680 tgtggtcggt gcagtcggcc cagccatcac agcgcagctc cttccggata caccgccccg 1740 tgcggcacgt gaactgcccc gggcatgggt cactggagtc gtaggagagg tattcagcta 1800 agaagccggt gtcggtgtag gactgatctg agtggaagcg aactgtgatc ttgttgctgt 1860 tgctggtgac gacgaactgg gacctctctc cgcagtattt ctccccattg atctccacgt 1920 agtccttggg gcaggtgccc gcaggcacgc cgggctccag caggtagaag aatttgaagc 1980 gcaccttcac atgctggttg ttgggcacct caatgttcca tgtgcagtca atgttgggtg 2040 ggtagtggcc tgggtagtag gggctgttga atgtcccctg ggctttacgt aagcggcctc 2100 cacagetget cateetagge agetggaaga aggtggeete aaageeeggg atgeegeege 2160 tcagtgttgg ttatcagtgt gatgagcagg acgttcgtgg gagggagtgg aaggtcaggt 2220 tgtaggaggg agggtaggtg ccacacaact gcaccagggg cgtggggctc catggggctc 2280 atgggtgttg tacaccgtca accaggtgtc tgccgcgctc gtcgcaggac gcaaggtcaa 2340 agetgeggaa ggtgaggete ageaetgagt eggegteeee eegeagggee eaetggeage 2400 gggcatgagc ggggtagggg ctgtcaggga agccgggcgt ggtgaagcgc atcagctcca 2460 caccgcgggc gtgcaggcca aagctgcagc tgttgtcctg ggtcctctgt actgttttgg 2520 agtccgtggg gaaagccacc actgaggtga ccacaaagga cttcagggag cgcgccgcg 2580 ggggcagcat gactacgcgc tecteggeca tgacgcgete ggeeteetee accaggtget 2640 gcgggatgct gaactcagac cagtagtagg cgatgacgct gccctcgctg aaggccgtca 2700 cagccgactc cttgtggtag gggcccagga atgggactcc gctgtacagc agcttcagcg 2760 cgtccttcac cttgctggcc aggcttacaa actcagtgga gttggagttc tcgtaggcat 2820 ccacaaaatt ctcatttgtg atcctcatgt agccattgaa gaccttctgg acacgcacgt 2880 eceggtactg caaatgecac accaggaage egateeceag caagaceaag aggaggeega 2940 tcagcacggc tgccagcacc acccagcgcc ccgggccatg cttttccacc ttcttgacgt 3000 tgttgactgg caggaactee aegeetteet eeaageeatt eaettteteg tgeegggagt 3060 tgtacttgag tcccgcgccg aagtccttcg ggccccctcc gcccttgcga cgaaa 3115

```
<210> 3707
<211> 3977
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1940)
<223> similar to gi4240183 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3707
gttaggtcct tgggcagaaa atgatcattt aaagaaggaa acctcaggtg tggtcttagc
                                                                       60
actttctgca gagggtcctc ctactgctgc ttcagaacaa tatacagata ggctggaact
                                                                      120
ccagcctgga gctgctagtc agtttattgc agcgacgccc acaagtctaa tggaggcgca
                                                                      180
ggcagaagga ccccttacag cgattacaat tcctagacct tctgtggcat ctacacagtc
                                                                      240
aacttcagga agctttcact gtggtcagca gccagagaag aaagatcttc agcccatgga
                                                                      300
gcccactgtg gaactttact ctccaaggga aaacttctct ggcttggttg tgacagaggg
                                                                      360
tgaacctcct agtggaggaa gcagaacaga tttggggctt cagatagatc acattggtca
                                                                      420
tgacatgtta cccaacatta gagaaagtaa caaatctcaa gacctgggac caaaagaact
                                                                      480
tcctgatcat aatagactgg ttgtgagaga atttgaaaat ctccctgggg aaactgaaga
                                                                      540
gaaaagcatc cttttagagt cagataatga agatgagaag ttaagtagag ggcagcattg
                                                                      600
tattgagatc tcctctcc caggagattt ggtaattgtg gaaaaggatc actcagctac
                                                                      660
tactgaacct cttgatgtga caaaaacaca gacttttagt gtggtgccaa atcaagacaa
                                                                      720
aaataatgag ataatgaagc ttctgacagt tggaacttca gaaatttctt ccagagacat
                                                                      780
tgacccacat gttgaaggtc agataggcca agtggcagaa atgcaaaaaa ataagatatc
                                                                      840
taaggatgat gacatcatga gtgaagactt gccaggtcat caaggagacc tctctacttt
                                                                      900
tttgcaccaa gagggcaaga gagagaaaat cacccctaga aatggagaac tatttcattg
                                                                      960
tgtttcagag aatgaacatg gtgccccaac ccggaaggat atggttaggt catcctttgt
                                                                     1020
aactagacac agccgaatcc ctgttttagc acaagagata gactcaactt tgggaatcat
                                                                     1080
cctctccagt ttctgcaaaa gaaaagctcc tccaaaagaa agcctatcag ccagacctag
                                                                     1140
tcaagcttct ggtggaaaaa agacaattca agtccttcct tggcgacctc tcaagtgcct
                                                                     1200
ctgataaatt gctagaggag aaactagcta ctgttcctgc tcccttttgt gaggaggaag
                                                                     1260
tgctcactcc cttttcaaga ctgacagtag attctcacct gagtaggtca gctgaagata
                                                                     1320
gctttctgtc acccatcatc tcccagtcta gaaagagcaa aattccaagg ccagtttcat
                                                                     1380
gggtcaacac agatcaggtc aatagctcaa cttcgtctca gttctttcct cggccaccac
                                                                     1440
caggaaagcc acccacgagg cctggagtag aagccaggct acgcagatat aaagtcctag
                                                                     1500
ggagtagtaa ctccgactca gaccttttct cccgcctggc ccaaattctt caaaatggat
                                                                     1560
ctcagaaacc ccggagcact actcagtgca agagtccagg atctcctcac aatccaaaaa
                                                                     1620
caccacccaa gagtccagtt gtccctcgca ggagtcccag tgcctctcct cgaagctcat
                                                                     1680
cettgeeteg caegtetagt teeteaceat etagggetgg aeggeeecae catgaecaga
                                                                     1740
ggagttcgtc cccacatctg gggagaagca agtcacctcc cagccactca ggatcttcct
                                                                     1800
cctccaggag gtcctgccaa caggagcatt gcaaacccag caagaatggc ctgaaaggat
                                                                     1860
ccggcagcct ccaccaccac tcagccagca ctaaaacccc ccaagggaag agtaagccag
                                                                     1920
ccagtaaact cagcagatag gagccaggct gcatctcttt gaaaggtgtg agatcttcct
                                                                     1980
cctaaacctg atgcatgtgt gtccctgtac tttctatgta aaaaaatcag tgttgatctt
                                                                     2040
ctcttgcaaa agaaagtaac atgatcaatt atttataaga agacataata catgataagg
                                                                     2100
aattacctaa ggcagggcag caagtagatt aggaatcaat gtctttgtac aagaaggaaa
                                                                     2160
aatagagcaa aaatccaagg gggagaaact cattaaaatg agctctcatt ttttaagctg
                                                                     2220
cctttgaaac aaaagagttg aggataggag atagaatgga attttagggg ggttgcctaa
                                                                     2280
tttttttaag cctcaattca aagattatat agcaaaagtg aaacttcttg tttgatattt
                                                                     2340
```

```
tcattcaaaa ctttcccacc ctgaagagtc attgatcaga tattagatta tataagaagt
                                                                   2400
ctgttgccag ggagccagta ttcatgtata tttggcttgt gtgtttattt cgtgtattga
                                                                   2460
gaatgaacac ctttactttg cctcattcct agtaccctcc ctggagttca gattttttt
                                                                   2520
taaaattttg tatgtctcgt ctgattcaat ctctctgctt ttattttatg gtcctagttg
                                                                   2580
tactatcaaa tccaattact tttttttagg tccccctgat ttttttttt tagagcaaga
                                                                   2640
2700
gtctaactag agctattttg caggctttag tgtttaggga gagaaagaaa gtgtgggtta
                                                                   2760
atagccttca agatagaaga tgccctttca tctctgttaa gtgtcctcct ttagaaactt
                                                                   2820
gagtagaagg aaaactgacc agagtagact gcttccttaa gtcttctggg ttccaactgt
                                                                   2880
ttgtaatatc agcatccaag atgatacgag ggaagcacaa tgctttggac tgtgatttga
                                                                   2940
gatttagaaa taaattagat atattattga ggcttagaat cctcaaactt tgtattttat
                                                                   3000
acatttagcc aataaggaat taatatctgg ggaaataaat ttaggcaaat atttctttt
                                                                   3060
taatgtttta ttacctgctt ctcctgtgtt ttagttcaac atttgggctt cttggcctga
                                                                   3120
ttttcataca atctcaattt acgaagctgt aaagaggaag atatttgttc taatctcact
                                                                   3180
cttctaatag gaatcaggca aatgaaagtc taccagactt ttaaaatqqq ctqtttttat
                                                                   3240
actctctagg tgttttgtgt tgtaaagacc ttattaaggt caggtaaatt ggtctgcttg
                                                                   3300
ctgttgaaat ttgccttcta gcaaacatat gtgctttctg ttccaccttg ctgtttgctg
                                                                   3360
ccaaacccaa tacagttcaa ttgggaaaca aaaaaaaaag aaaqqaatac atttcctccc
                                                                   3420
caagtgaaca tottotaatg otgoatcaaa gotgoootga agotgoactg aacttotott
                                                                   3480
gttctcttta tctggggtga gctttttaaa aaaacaaact caaaacacta ttgaggcata
                                                                   3540
taacgtctct tataagaaat gtagcatagt gtggaatctt aatttctctc cagtttcaaa
                                                                   3600
cactccagag gaatgcaata gataagacat acttqctqtt tatctaaagc aactgtaata
                                                                   3660
ttggaagatc agtccttctg tattatattg tataatagtt gctataacac tacttgcatg
                                                                   3720
tcttcatggt aaattatata aatatttata aatatataga gagacatatc cttatataga
                                                                   3780
gtcattettt gtcattetee atttgtaatt tegagateae agatggegaa atteetttte
                                                                   3840
tattgtgtgc ctcatgtaca cttgggcctt gcctatcttc attttcttga actatgttct
                                                                   3900
tggcatgtga cacctcagag tcttcttgcc ttccctgtgt acaatgcaag ggtgggcagt
                                                                   3960
atttaacaag ccaagaa
                                                                  3977
    <210> 3708
    <211> 2215
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (2217)...(2020)
    <223> similar to gi19917 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

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<400> 3708
ttttttttt ttcctgagac agcagagcat aagtcctttt aattatgtgt ttgaaaaatg
                                                                       60
tcacaagtca aaaaaggaac acaaggcagg ctccggctcc ctccaccccc gtgaggagcc
                                                                      120
cttgtccatt tcagccttgc actcagaaag accccggggg gtctgtgtac gttccacgtg
                                                                      180
cttcatgttt cgtggtatct gtcagagcct taaaacaggg cccacccact actgtgaaat
                                                                      240
ttcaaggaaa taactgattc agttaaataa cagtcccaag gtagacctgg tctcacaggt
                                                                      300
gaccacccgc ttaaatccag agccttcttt tctgtccaaa gccactgaaa tttgatctcc
                                                                      360
tccttcacac attcccaggt ccccaatatg ccacccacct tctgacaggt ggctacaggt
                                                                      420
ctacactaat ggaagctctg ctaaaaacat ctccacccaa ccctcctgcc aacgaggtca
                                                                      480
gctggcaggc atctgctaag cccctaaact ggtcagcgca ggttatgcgc ccattccqaq
                                                                      540
```

```
acccaaacaa tactccagga cttcgcacct cctcctcgag aggcaacgga gagaactgct
                                                                      600
cttacttcaa tctgacagtc aagggagagc acacaaataa aacgtcccat ctggaagaaa
                                                                      660
tcagggaagc tggggaaatg aggctgttca tcaactttta agagctcaaa cttggctgtg
                                                                      720
taactttcag acctagetta tggttgggga ccacctgaac tggcccccag ggttgcctct
                                                                      780
ctctcaacac aaggtgcata ctgaaccctt ctgcagtgta gtacacgttg ctgccgcaag
                                                                      840
tgcaaaggcc acgagggaaa gaccttttaa ccagagcaag gggaatctga aatgccagaa
                                                                      900
gggggaaggt cggttcgcct gaagacctct tctggcctgt gtggaaagga cggcccttg
                                                                      960
tcaaccctgg ggaagcactg cagatgtgaa gcggtttggc cactcttggg cactgactga
                                                                     1020
gggtgatgaa cgaggaaggg agcaagagct gaaggcgagg agagcgctag gaggcaqqqa
                                                                     1080
acctggagcc aggggctgcc tggcagggct ttaggctgaa gcccccaaag cgtagttccc
                                                                     1140
ttcactggct caaacataaa aggaaccaaa ctgtttgggg aaaaaggcca ccctctggcc
                                                                     1200
tttcaaaaca ttctctcaca attctatgcc atatgagtgc aggcttaatt cgtccagtga
                                                                     1260
attctatgca aatgtttcaa gaagctgctg ttaacaggaa caatgtgtac ctggtacaca
                                                                     1320
ctgatcctat gggggtggga ggagagagag ggaaggaagc aaagaggagc cgcctccctt
                                                                     1380
cctactgtgc tcttcagatc tgtcagtggg gccgggcgca gcagatggcc ccctccccag
                                                                     1440
aggcagggga gagtcctcca ccccctctgc agcctccagg agcattctga cttccaccag
                                                                     1500
caggcactcc agttattatg catctagaca tatggatcta cacgaggaac ccccggcgca
                                                                     1560
gccaagetet gcgctggete ccgcacagge gaagegegeg cagcageaca ggageeeege
                                                                     1620
ccctgcagct tgacgagctg agctggggtc cacaggaacc acgccccaag gagcgtttgg
                                                                     1680
ggatggtagt ggggagacag gccattggct tccccctctt tctaaggaag tcagcctcac
                                                                     1740
totactcott ggggatttcg aacatgcaga ggctcttgta cttttgcaga agctcattct
                                                                     1800
tggtcctgac ttgctcccgg aggctctgca gctgctgctg ctgctgttcg gggctcaggt
                                                                     1860
ggatgccggg catggtgctg atgagcttgc gcatctcctg gaacttgctt ttgagggcgt
                                                                     1920
tcaggtcctg gtggacctcc gggctgtcct tgtccatgca tttgatgatg ttgtgaacca
                                                                     1980
aaggtaaaaa ggagtagtte tetteeteee tegegeggge aggtgaetga ggeegtggeg
                                                                     2040
ccggcgactg ctgcggttga ggcgcaggga ccggcggcgg ctgaggaggc ggcagcggct
                                                                     2100
tggtgtcagg cagcgcctgg tcggacgttg gcggcaatac atcctccgcc tgtcgcccgg
                                                                     2160
ctgccacccc agcagaggcc atggctccgg gggtaggtta gccagaggtc gggtc
                                                                     2215
     <210> 3709
     <211> 1555
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1557)...(261)
     <223> similar to gill85452 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3709
gacccccggg gttttcccct ccccgccgtg ttaaaccgcc ggccccggaa ttgaattagg
                                                                       60
gggccccaaa aaaaaaataa tacctttccc gcccccggca ctaaaatttg gttctttaaa
                                                                      120
acggcccccc ccttttttt ttttttgatg ctgtgacttt tattctaata cacacattga
                                                                      180
tttgattaaa ccaagttcag ggataaggca aatatacatt cttgttcccg aaaacatccc
                                                                      240
aggcagtttc agcgtctttc agcacagatg aggtagggtt ggggctgcaa tgtcatgcct
                                                                      300
aacctgggct tcagatctgg aactagttca tgtggaaaat gcaaatgaaa cctctgaagc
                                                                      360
aatgctgtaa aaaacaagaa catttccatc cgagccaagt gttctcccaa ggacaatgtc
                                                                      420
ttcttcctag ggggaaaaag ggaacccaaa gcttcccttc ttggggccaa aatatcccac
                                                                      480
tgctggtccc aggaaatcgc tcagggatgg ggaacacttt ctggggggtct tctcccggta
```

540